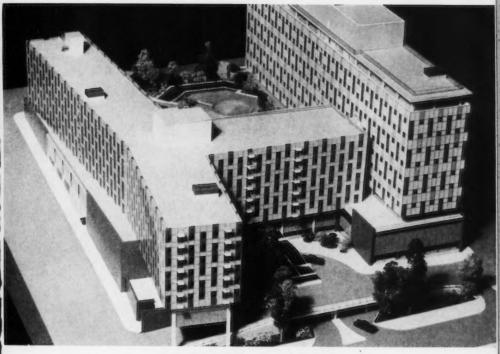
CALIFORNIA VETERINARIAN



JACK TAR HOTEL, SAN FRANCISCO

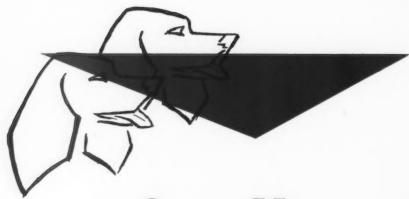
CONVENTION HEADQUARTERS

JUNE 27, 28, 29, 1960



MAY-JUNE, 1960

PUBLISHED BY CALIFORNIA VETERINARY MEDICAL ASSOCIATION



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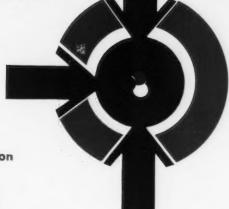
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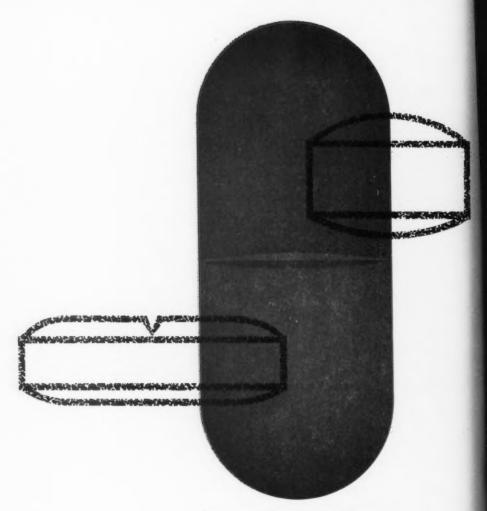


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Make it a Must! SAN FRANCISCO IN JUNE



The 72nd Annual Convention of the California Veterinary Medical Assn. to be held in the new Jack Tar Hotel

JUNE 27, 28, 29, 1960

See Next Page for Convenient

ADVANCE REGISTRATION

This page may be removed from the Journal for your Convenience and Reference.

An Outstanding Program of Large and Small Animal Sessions

(Printed elsewhere in this issue) including an Innovation: WORKSHOPS, which will be of great interest — at no extra charge

Don't Miss "A Night at The Village"

Columbus Avenue and Lombard Street

A Gala PRESIDENT'S BANQUET & DANCE in the Beautiful Las Vegas Room—Dr. R. E. Duckworth, M.C.

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FREE LUNCHEON, JUNE 29, for REGISTRANTS and EXHIBITORS

COFFEE and SOFT DRINKS SERVED FREE in EXHIBIT AREA

FOR THE LADIES: A breath-taking Bay Cruise . . . Fisherman's Wharf . . . Cable Car Rides . . . Lunch in a famous Restaurant . . . Entertainment . . .

ADVANCE REGISTRATION

72nd Annual Convention, June 27, 28, 29, 1960

PLEASE FILL IN, DETACH AND MAIL WITH CHECK TO CVMA

3004 16th Street, San Francisco, Calif. Receipt and Badge will be waiting for you at the Registration Desk, JACK TAR HOTEL, Van Ness Ave. and Geary St., San Francisco.

Refund will be made if you pre-register and are unable to attend.

☐ I enclose check for A	Advance Registration. CVMA Member \$7.50, Non-Member \$15.
Also included \$7.50 E. (This will aid us in de	ACH for President's Banquet tickets at The Village, Monday, June 27. etermining number of reservations to make.)
Name	Address
Cir	





THE CALIFORNIA VETERINARIAN

MAY-JUNE, 1960

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 - In addition to members of the CVMA, the following states also receive THE CALIFORNIA VETERINARIAN: Arizona, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Hawaii.

Volume 13

No. 5

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Why You Can't Afford to Miss the June Convention

Our Executive Secretary, Mr. Humphreys, has asked the writer to discuss the subject, "Why You Can't Afford to Miss the June CVMA Convention." In approaching this it

1

seems apropos to mention in retrospect that the program committee prior to inviting anyone to appear on our June agenda - made a careful survey of your desires. This was done in an effort to put together a "practitioner's program" - one that you, the members, wanted. Following

R. L. COLLINSON wanted. Following this survey the committee decided on the subjects it desired to have covered. Hence, in each instance, the committee designated the topic for the speaker. We felt it was best to "make a blueprint—then build accordingly"—for you.

We are sure the result of this thinking and planning will be evident to you all as you review what is in prospect beginning June 27

review what is in prospect beginning June 27.

One attendance-hampering factor always prevailing with regard to the summer meeting

is that most of us are in the midst of our busiest practice season. This means attendance will cost us money. Why, then, should we attend? It is the firm belief of the writer and every member of the program committee that each and every day of the coming June meeting will offer to you not one, but many hints and aids for you to take home and put to use in your own practice. This, then, means the program will make you money in the months to come. It emphasizes the fact that you can't afford to miss the convention.

A star-studded program—one with such talent as Smith, Hagan, Woelffer, Cummings, Ott, Johnson and Brinker is, in our opinion, a "must." But, let's look even further. Never has such a successful survey of business practices been made. Dr. Stekler's questionnaires were answered with overwhelming response! Here will be facts-facts that can and will aid you in your practice-IF YOU ATTEND! You have specific problems you want to have covered-this you can do. Looking further-we see practical workshops, at no extra charge; and finally, we feel it is high time our membership took a direct, analytical look at ourselves and our profession-if we are to progress, if we are to help guide our own destiny -we have a panel for your study. Don't you agree? You can't afford to miss the June Convention!

R. L. Collinson, Program Chairman

San Francisco in June

In June, our convention month, you will find a season of warm days and cool evenings, with an average maximum temperature of 65.5° and an average minimum of 58.8°. It never rains during the summer, but often there is a light fog in the early morning, the sun shining brightly by noon, and the evenings clear.

The air is invigorating and you truly feel like stepping along and breathing deep of its clean freshness. You will be stimulated—you will want to be on the go—to see and do things—to ride the quaint cable cars—to explore Chinatown—to see colorful Fisherman's Wharf, the beautiful bridges, parks and scenic views—to get on the very top of the city and look out and down upon the breathtaking panorama which enfolds you.

And now for dress—San Francisco is a sophisticated city, and San Francisco women are among the most beautifully groomed in the world. They favor lightweight wool suits and dresses, and because of the breezes from the Bay, prefer small hats. San Francisco is a city in which women feel positively undressed unless wearing hats and gloves. If the lady has furs, she is sure to enjoy cuddling into them here—as much for show as for warmth. For June it might be wise to include a dark silk

basic dress or two piece costume for that highly possible extremely warm day.

Men prefer the more conservative, light to medium weight wool suits and are also meticulously groomed. Straw hats are sometimes seen during the summer months, but felt hats are in the majority. The gay and sometimes flashy sport clothes so often worn in other California cities are not seen in this cosmopolitan city.

For both men and women, a lightweight wrap is essential. Leave the white shoes at home—they are never worn in San Francisco.

However, if you are visiting with friends down the peninsula or across the Golden Gate Bridge in Marin County, you may choose to bring along casual cotton clothes and light shoes. A few miles away from Nature's airconditioned San Francisco makes a big difference, and the temperatures may climb into the 90's.

You'll enjoy "The City"—HAVE FUN THE SAN FRANCISCO WAY—and be sure to add an extra day to see it all!

Two veterinarians recently assisted a surgeon of a West Berlin hospital in performing a successful appendectomy on "Jambo," a 10-year-old cow elephant at the Berlin zoo.

Convention Committees and Highlights

Program Committee June, 1960

R. L. COLLINSON, Chairman

CLYDE E. Brown, Northern California Coordinator

J. Bradley Crundwell, Southern California Coordinator

Conrad J. Ferreira, Chairman, Large Animal Committee

ARTHUR J. EISENHOWER, Large Animal Committee

ROBERT S. DICKSON, Large Animal Committee

RALPH C. VIERHELLER, Chairman, Small Animal Committee

William M. Stansbury, Small Animal Committee

WARREN G. WALKER, Small Animal Committee

MERTON J. SILVER, Coordinator

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CHARLES H. REID, Chairman

Speaker Hosts

Joseph M. Arburua, J. M. Christensen, Conrad J. Ferreira, Floyd W. Koebel, William K. Riddell, A. Mack Scott, William M. Stansbury and Richard B. Tangeman, R. C. Vierheller.

Reception Committee

R. B. Barsaleau, E. C. Bland, I. N. Bohlender, A. N. Davis, R. A. Dove, O. K. Kendall, E. M. Makino, D. H. Marioni, L. M. Proctor and W. E. Steinmetz.

Local Arrangements Committees

Transportation — RICHARD L. STOWE, Chairman; ROGER A. BURR, KENNETH G. CRAMTON, DAVID M. STROHAUER.

Equipment—O. B. McRory, Chairman; Richard L. Stowe, W. E. Mottram.

Specimen—M. A. Northrup, Chairman; W. L. Kanawyer, M. J. Green.

Miscellaneous—Joseph Wachs, Chairman; Albert Chafets, Arthur Freid.

Cocktail Party—E. A. Siegel, Chairman; N. T. Freid, E. C. Bland.

Golf—H. F. CARROLL, Chairman; T. M. Mc-Intyre, V. C. Paulson.

Program Highlights

Workshops — Monday morning, 9 o'clock sharp, June 27, will be devoted to specialized discussions of down-to-earth problems and each speaker will present his subject matter four times. There will be no extra fee for the Workshops. This is an innovation, and should prove extremely popular and instructive.

Business Management Questionnaire — As businessmen, how are we doing in our practices? Some amazing facts will be presented by Dr. Herman Stekler of the Graduate School of Business University of California. Dr. William M. Stansbury and Dr. Stekler prepared the questionnaires which were distributed to our entire membership. The response to them was astounding — nearly 500 were returned, which will make the analysis very representative and informative. Dr. Stansbury will assist Dr. Stekler in presenting the analysis on Tuesday afternoon. The Ladies are invited.

Investment and Estate Planning—Raymond Bolton, attorney; Harold Johanson, C.P.A., and Glendon Wardhaugh, trust banker, will advise on these important subjects, which every veterinarian should have knowledge of. The LADIES ARE INVITED TUESDAY AFTERNOON.

Self-Analysis Panel—"Where have we been—where are we now—and where are we going in our profession—Veterinary Medicine?" Dr. William A. Hagan, former Dean of Cornell; Dr. William W. Putney, third vice-president, CVMA, and Harry H. Costello, controversial publisher of American Veterinary Publications, will give their opinions. Don't MISS THIS!

Scientific Speakers—All men were selected by the program committee for their knowledge, ability and practical manner of presenting their subjects.

Hotel Reservations

Please write now for hotel reservations. Address Miss Claire Perkins, Sales Manager, Jack Tar Hotel, Van Ness and Geary Street, San Francisco.

Room Prices: \$12-20 for singles, \$14-22 for doubles, \$16-25 for twins, \$18-26 for studio rooms.

If you prefer, you may reserve a room at the RICHELIEU HOTEL, Van Ness and Geary Streets—just across the street from the Jack Tar. (Miss Perkins, Jack Tar Hotel, will make these reservations for you.)

Room Prices: \$6-12 for singles, \$8-15 for doubles, \$10-16 for twins, \$20-25 for parlor suites.

CONVENTION SPEAKERS



WILLIAM A. HAGAN

Dr. William A. Hagan, past president AVMA, and Dean, New York State Veterinary College, Cornell University, from 1932 to 1959, obtained his D.V.M. degree from Kansas State University in 1915. He also holds a D.Sc. (honorary) from Kansas State University and the M.S., from Cornell University. Dr. Hagan has been an instructor in pathology at Kansas State; instructor, assistant professor and professor of bacteriology, N. Y. State Veterinary College, Cornell University. Presently he is professor emeritus, Cornell University; director, National Animal Disease Laboratory, U.S. Dept. of Agriculture, Ames, Iowa, where he resides; and vice-president, World Veterinary Congresses. He is an honorary member of the Royal College of Veterinary Surgeons, Great Britain; Royal Veterinary Society, Sweden, and the Hellenic (Greece) National Veterinary Society. He is the author of "The Infectious Diseases of Domestic Animals," now in its 5th edition.



WILLIAM W. PUTNEY

Dr. William W. Putney is third vice-president of the CVMA, and chairman of the membership committee. Born in Virginia, Dr. Putney received his D.V.M. Degree from Alabama Polytechnic Institute in 1943. He is a small animal practitioner in Winnetka, California. Dr. Putney has been very active in State Association and Southern California VMA affairs, having been a former president of the latter group.



HARRY H. COSTELLO

Harry H. Costello, publisher of Modern Veterinary Practice, was born in Chicago, 1901, and for most of his business life was a publisher's consultant. He was a consultant for the North American Veterinarian until he moved to Mexico in 1949. Six years later he returned to this country and purchased the N.A.V. and American Veterinary Publications. He is responsible for many innovations in the veterinary publishing field. He is best known for his outspoken criticism of "a lack of competent leadership" in the veterinary profession. He resides in Santa Barbara.



HAROLD J. HILL

Dr. Harold J. Hill was born in New Hampshire in 1921. He attended the Agriculture School at the University of New Hampshire; studied veterinary medicine for two years at Michigan State College, and received his D.V.M. degree in 1946 at Colorado State University. In 1947, Dr. Hill was Assistant Professor in Surgery and Clinics, and veterinarian in charge of artificial breeding service at Colorado State. From 1949 until 1958 he taught veterinary obstetrics, animal reproduction and genital diseases and sterility. He organized the Colorado Bull Evaluation Service in cooperation with the Colorado Cattleman's Association, the only service of its kind offering a scientific approach to evaluation of range bulls as to breeding soundness. He is past president of the Colorado VMA. He originated Armour's Beef Cattle Improvement Research in 1958.

CONVENTION SPEAKERS



KENNETH W. SMITH

Dr. Kenneth W. Smith is a native of Colorado, and graduated in veterinary medicine at Colorado State University in 1932. He entered general practice at Lewiston, Utah, where he remained 4 years. After one year teaching at New Mexico State University, he joined the veterinary faculty at Colorado State University where he taught courses in clinical veterinary medicine for nine years. Dr. Smith then entered private practice in Sioux City, Iowa, where he operated a small animal hospital in partnership with Dr. E. G. Cole for 12 years. He returned to Colorado State University in 1958 as Professor of Surgery and Clinics where he is located at the present time.



E. A. WOELFFER

Dr. E. A. Woelffer was born on a farm in Wisconsin, graduated from the University of Wisconsin in 1922 with a B.S. degree in Agriculture and obtained a degree in Veterinary Medicine from Cornell University in 1931.

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Following graduation from Cornell, he became Farm Supervisor and Veterinarian of four dairy farms owned by a large milk company in Boston. During that time he was secretary-treasurer of the Massachusetts and New England Veterinary Associations, also past president of the Massachusetts Veterinary Association and past member of the Massachusetts Board of Examiners. In 1947 he was professor and director of Veterinary Extension, University of Illinois. He resigned to become Veterinarian and Vice-President of Pabst Farms, Inc., Oconomowoc, Wisc. In 1949 he entered private practice, specializing in reproductive diseases of cattle and consultation work.



RICHARD L. OTT

Dr. Richard L. Ott received his D.V.M. degree from Washington State College in 1945, and practiced with Dr. P. G. Mackintosh in Yakima for nearly two years. He served in the Army in the Tropical Disease Research Laboratory in Manila for more than two years. Before returning to W.S.C. as Director of the Small Animal Clinic in 1949, Dr. Ott practiced for a year in Petaluma. At present he is chairman of the Dept. of Clinical Medicine and Surgery, Washington State College.



RAYMOND BOLTON

Raymond Bolton is an attorney-at-law and member of the law firm of Thiel, Sassone & Howard. He was formerly tax manager of CPA firm of Thompson, Dechow, Johanson & Reich. He is a member of California CPAs; Alameda and American Bar; tax section of American Bar, and member of East Bay Estate Council. He was born in San Francisco and has B.S. and LL.D. from the University of San Francisco. He is a writer and lecturer on tax subjects.

HARRY W. JOHNSON

Dr. Johnson, large animal practitioner from Littleton, Colorado, received his degree from lowa State University. He taught at the University of Illinois for three years, and Colorado State University for ten years. For the last ten years his practice has been limited to large animals. He is a past president of the Denver Metropolitan Veterinary Medical Association, and is a board member of the American Association of Equine Practitioners.

CONVENTION SPEAKERS



GLENDON WARDHAUGH

Mr. Wardhaugh is Trust Officer of the Wells Fargo Bank-American Trust Company, Oakland. Born in Canada, he attended the University of British Columbia and LoSalle Extension University. He is a past-president, Estate Council of the East Bay, and a member of the Oakland Tax Section. Mr. Wardhaugh is married and the father of four children.



HAROLD JOHANSON

Mr. Johanson graduated from New York University, majoring in accounting. He has been a member and partner of Thompson, Dechow, Johanson & Reich, Certified Public Accountants, since 1953. He is a member and past-president East Bay Society of CPAs; a member of Council of East Bay Estate Planning, and past-president, Oakland Junior Chamber of Commerce. He is prominent in Oakland civic affairs.

HERMAN STEKLER

Dr. Stekler received a Ph.D. from Massachusetts Institute of Technology in economics and specialization in research industry studies. He also has B.A. and M.A. degrees. At the University of California Graduate School of Business Dr. Stekler teaches business methods and economics. His analysis of the Business Management Questionnaire, sent to all CVMA members, will prove astounding.



FRED G. CUMMINGS

Dr. Fred G. Cummings graduated from Colorado State in 1941 and since that time has been in small animal practice in Seattle, except for a three years' "vacation" for polio. He was stricken in 1948 and in 1952 resumed his practice. He has specialized in bird work since 1952, but also continues to do dog and cat work. In addition he runs a veterinary supply house for practitioners in the Pacific Northwest. His chief outside interest is sports, especially football. Both he and Mrs. Cummings are very active in their church.



WADE O. BRINKER

Dr. Wade O. Brinker was born in Ohio and received his D.V.M. degree from Kansas State College in 1939, and the M.S. degree from Michigan State University in 1947. He is head of the department of surgery and medicine in the College of Veterinary Medicine at Michigan State University. With the exception of five years in the Army Veterinary Corps, Dr. Brinker has been an M.S.U. staff member since he became a graduate assistant in 1939. He was named veterinarian of the year at New York City in March, 1954, by the Gaines Dog Research Foundation and was selected by a majority of 1,700 veterinarians. In 1954 Dr. Brinker was president of the Michigan State Veterinary Medical Assn.

Convention Committees and Highlights

President's Cocktail Party and Banquet

Cocktails - Hosted by San Francisco and northern and central California associations in the Crown Room, The Village, Monday, June 27, at 7 p.m.

President's Banquet-Las Vegas Room, The Village, at 8:30 p.m. Dr. R. E. Duckworth will be Master of Ceremonies.

Dr. Duckworth is an alumnus of San Francisco Veterinary College, a former state department veterinarian, and presently retired.

Our honored guest will be Charles S. Travers, retired Executive Secretary.

Installation of Officers

Col. Robert L. Foster, Life Member of the CVMA; past president, AVMA, and retired Chief, Army Veterinarian Corps, will install the officers for 1960-61. Colonel and Mrs. Foster have just returned from a tour of the Far East.

CVMA Golf Tournament

Sunday, June 26

Crystal Springs Golf Course, Burlingame

Tee-off time 12 noon, and every 5 minutes thereafter. Bay area hosts will provide transportation to and from course. Trophies: Low Gross; Shor-Line low net; the Charles S. Travers trophy for low net based on club established handicap; the Jen-Sal trophy for the ladies (low net) and the CVMA Executive Secretary's trophy for Exhibitors, low net. All trophies are perpetual. Golfers are urged to meet at 10:30 a.m. in convention lobby of Jack Tar Hotel for transportation.

Executive Committee Meeting

Friday, June 24, 1960 7:30 P.M.

Jack Tar Hotel Twin Peaks A Room

House of Delegates Meeting

Saturday, June 25, 1960 (Sunday, 9 a.m., if necessary)

7:30 P.M.

Jack Tar Hotel Twin Peaks A and B Rooms

WOMEN'S PROGRAM SUNDAY, JUNE 26

10:00 a.m. - Executive Committee Meeting, Jack Tar Hotel.

1:00-5:00 p.m.—Registration. 12:00-1:00 p.m.—Lunch Break.

MONDAY, JUNE 27

9:00 a.m.-5:00 p.m.-Registration.

9:45 and 10:30 a.m. - Buses leave for Bay Cruise.

11:00 a.m.-Bay Cruise.

12:00 m.-Lunch, Fisherman's Wharf. 1:00 p.m.-Last bus retruns.

7:00 p.m.-Local Association, Cocktail Party, Crown Room, The Village. 8:30 p.m.-President's Banquet, Las Vegas

Room, The Village.

TUESDAY, JUNE 28

9:00 a.m.-5:00 p.m.-Registration.

10:00 a.m.-Business Meeting, Jack Tar Hotel. 1:30 p.m.-Evaluation of Business Management Questionnaires. (Joint meeting with men, Jack Tar Hotel.)

WEDNESDAY, JUNE 29

12:00 m.-Cocktails and Ice Show on the Patio, Jack Tar Hotel.

1:30 p.m. - Luncheon in the International Room, Jack Tar Hotel. Installation; Count Marco; Drawing and Door Prizes.

Program for Children

Monday, June 27-Bay Cruise.

June 28 - Pre-Teen-Trip to Zoo, 1:00-3:00 p.m.; Teenagers-Tour China-

town, 1:00-3:00 p.m. Wednesday, June 29—Swimming, followed by Coke and Pizza, 10:00-12:00 noon.

Women's Auxiliary Officers

President-Mrs. BEN S. BURDO President-Elect-Mrs. Russell P. Cope First Vice-President-Mrs. Donald E. Jasper Second Vice-President—Mrs. Louis V. Johnson Membership Secy.—Mrs. William W. Putney Secretary-Mrs. HAROLD SNOW Treasurer-Mrs. RONALD T. HAUGE

Local Arrangements Committee— Women's Auxiliary, CVMA

MRS. W. L. KANAWYER, Chairman

MRS. ERNEST A. SIEGEL, Registration

MRS. RICHARD L. STOWE, Door Prizes MRS. NORMAN T. FREID, Decorations

MRS. ROGER A. BURR, Secretary

MRS. HAROLD F. CARROLL, Teenage Program MRS. MILTON C. LEVY, Bay Cruise MRS. EDWARD C. BLAND, Decorations

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72nd Annual Convention—California Veterinary Medi soci

CONVENTION SPEAKERS

Raymond Bolton, L.L.D., Thiel, Sassone & Howard, Oakland, Calif.

Wade O. Brinker, D.V.M., M.S., Head, Dept. of Surgery and Medicine, College of Veterinary Medicine, Michigan State University.

Harry H. Costello, Publisher, Modern Veterinary Practice, Santa Barbara.

Fred G. Cummings, D.V.M., Practitioner, Seattle, Wash.

William A. Hagan, D.V.M., M.S., D.Sc., Professor Emeritus and former Dean, N. Y. State Veterinary College, Cornell University.

Harold J. Hill, D.V.M., Director, Armour's Beef Cattle Improvement Research, Denver, Colorado.

Harold Johanson, C.P.A., Thompson, Dechow, Johanson & Reich, Oakland.

Harry W. Johnson, D.V.M., Practitioner, Littleton, Colorado.

Richard L. Ott, D.V.M., Chairman, Dept. of Clinical Medicine and Surgery, Washington State College.

W. W. Putney, D.V.M., Third Vice-President, CVMA; Practitioner, Van Nuys.

Kenneth W. Smith, D.V.M., Professor of Surgery and Clinics, Colorado State University.

Herman Stekler, B.A., M.A., Ph.D., Graduate School of Business, University of California.

Glendon Wardhaugh, Trust Officer, Wells Fargo Bank-American Trust Company, Oakland.

E. A. Woelffer, D.V.M., B.S., Practitioner, Oconomowoc, Wisc.

MONDAY, JUNE 27, 1960 Morning

9:00—WORKSHOPS — (Four 30-minute present tions with 10-minute intermissions. Eas speaker will present his subject matter for times.) There will be no extra fee for workshops.

Co-ordinator: Merton J. Silver

Orthopedic Appliances and Procedure Wade O. Brinker; assistant, Ralph C. Vie heller

Bird Practice, Fred C. Cummings; assistant J. M. Christensen

Equipment for Beef and Dairy Bull Evalution, Including Practical Universal Fom Harold J. Hill; assistant, Richard B. Tangman

Practical Restraint Procedures in Equin Practice, Harry Johnson; assistant, William V Dakin

Non-Parasitic Skin Diseases of the Aged Dog Richard L. Ott; assistant, John S. Blackard

Practical Methods of Diagnosis and Tred ment of Uremic Syndromes, Kenneth W Smith; assistant, Wm. K. Riddell

Laboratory Aids in Dairy Herd Health Programs, E. A. Woelffer; assistant Floyd W. Koehel

11:45-DRAWING - Television Set, Exhibit Hall

Afternoon

Chairman, Ralph C. Vierheller

GENERAL SESSION

1:30—Panel Discussion — PRINCIPLES OF IMMUNI ZATION — Distemper, Hepatitis and Lepto spirosis — large and small animal, Richard L Ott, Kenneth W. Smith

1:30-Richard L. Ott

2:15-Kenneth W. Smith

3:00-Coffee Break - VISIT EXHIBITS

3:20-Rebuttal - Richard L. Ott

3:40-Rebuttal - Kenneth W. Smith

4:00-Questions and Answers

ROGRAM

h sociation—Jack Tar Hotel, San Francisco, June 27, 28, 29, 1960

TUESDAY, JUNE 28, 1960

SMALL ANIMAL

Morning

Chairman, Clyde E. Brown

9:00—Orthopedics, Wade O. Brinker 9:40—Questions and Answers

10:00-Coffee Break - VISIT EXHIBITS

10:30—Kidney Disease and Other Uremic Syndromes in Small Animals, Kenneth W. Smith

11:10-Questions and Answers

LARGE ANIMAL

Morning

Chairman, Robert S. Dickson

9:00-Vertical Integration - Do You Fit into Agribusiness?, William A. Hagan

9:40-Questions and Answers

10:00-Coffee Break - VISIT EXHIBITS

10:30-Horse Practice - Harry Johnson

11:10-Questions and Answers

Afternoon

Chairman, William M. Stansbury

GENERAL SESSION

Ladies Invited

1:30—Evaluation of Business Management Questionnaire, Herman Stekler, Graduate School of Business, University of California

3:00-Coffee Break - VISIT EXHIBITS

3:20—Investment and Estate Planning, Raymond Bolton, attorney; Harold Johanson, C.P.A.; Glendon Wardhaugh, trust banker

WEDNESDAY, JUNE 29, 1960

SMALL ANIMAL

Morning

Chairman, Warren G. Walker

9:00—Non-Parasitic Skin Diseases of the Aged Dog, Richard L. Ott

9:40-Questions and Answers

10:00-Coffee Break - VISIT EXHIBITS

10:30-Orthopedics, Wade O. Brinker

11:10-Questions and Answers

LARGE ANIMAL

Morning

Chairman, C. J. Ferreira

9:00—Practical Diagnosis and Treatment of Dairy Herd Problems, E. A. Woelffer

9:40—Questions and Answers

10:00-Coffee Break - VISIT EXHIBITS

10:30—Importance of Bull Evaluation in Dairy and Beef Herd Operations, Harold J. Hill

11:10—Questions and Answers

FREE LUNCH with Exhibitors as our Guests, EXHIBIT HALL

Afternoon

Chairman, J. Bradley Crundwell

GENERAL SESSION

1:30—Self-Analysis Panel — Veterinary Medicine . . . Our Profession: Where Have We Been — Where Are We Now — Where Are We Going?

William A. Hagan, W. W. Putney, Harry H. Costello (20-minute paper each)

2:45—Coffee Break — VISIT EXHIBITS

3:15-Rebuttals (10 minutes each)

3:45—Questions and Answers — General discussion

Exhibitors at San Francisco Convention

The following firms represent the largest number of exhibitors ever to display their products before an annual convention of the CVMA. These reliable firms supply many of your professional needs, and we urge you to visit with them. You will find the representatives both friendly and helpful. Exhibitors add to the success of your convention, and many of these firms support "The California Veterinarian" the year 'round by their advertising and editorial contributions.

AMCO DRUG PRODUCTS CO.

This firm will display "Pectromycin" tablets—improved anti-diarrheal; "Thi-Cobal Elixir"—appetite stimulant; "Verdisan"—detergent sanitizer; "Fecobal Elixir"—outstanding hematinic; "Libradol Veterinary"—very effective topical decongestant; "Dermatrex" tablets—for certain dermatoses. Booth 13.

AMERICAN VETERINARY PUBLICATIONS, INC.

Exhibiting new, modern Veterinary Practice Reference and Data Service; Modern Veterinary Practice (our journal), and books: Canine Medicine, Canine Surgery, Diseases of Cattle, Pathology of the Dog and Cat. Booths 35, 36.

ARMOUR PHARMACEUTICAL COMPANY

The following products from Armour's specialties line will be shown: Kymar; Adrenomone; NOnemic, useful for baby pig anemia; Antrate H. C. hog cholera antibody concentrate; Armovac-A, a modified hog cholera virus; and Caminal-S, a new vitaminmineral preparation for dogs and cats. Booth 14.

BANES LABORATORY

We will exhibit fungi-bactericides, parasiticides, insecticides, in the forms of liquid soaps, shampoos, rinses, disinfectants, skin medications. Twenty-five years' experience in serving the veterinary medical profession. Booth 2.

BANNER CROSS MEDICAL SPECIALTIES

Specializing in the finest imported pressure support bandages and splinting in the world. Type ranges from heavy duty through medium and lightweight fabrics. Special treatment for tendonitis and inflammation and congestion of limbs. The only adhesives that will stick to the hair of animals. Special purpose splints and foams; textiles and plastics. Booth 27.

THE BIRTCHER CORPORTION

The equipment exhibited consists of our Hyfrecator, a desiccating unit. A Blendtome, complete clinical electrosurgical unit. Our Spot Quartz Ultraviolet Lamp. Possibly our small Diathermy, an Ultrasound Unit, and our Vibra Bath, a hydrotherapy unit for animals, together with particular accessories applicable to Veterinary use. Booth 55.

H. C. BURNS COMPANY, INC.

With great pride the H. C. Burns Company presents the only complete line of Grooming Products available to the veterinary profession. Also, later developments in the large animal branch which have been field-tested and clinically researched. These products, too, have proven to be outstanding for the specific purpose designed. Booth 24.

CALIFORNIA MEDICAL SUPPLY COMPANY

Courteous representatives will be at our booth to detail Alcon Laboratories' new line of sterile opthalmic preparations for the diagnosis and treatment of ocular disorders among animals. Booth 23.

CAMERON SURGICAL INSTRUMENTS CO.

Cameron shows its all new line of Electro-Surgical Units, including their new powerful 60 model. Cameron Electro-Surgical Units are ideal for anal gland, entropion, teat surgery and many more surgical techniques. Fast, safe, practical. The ideal unit for the large or small animal man. Also showing a complete line of diagnostic equipment. Booth 51.

CENTRAL CITY CHEMICAL CONS. and SHARPE & VEJAR COMPANY

Central City Chemical and Sharpe & Vejar Co. will be displaying the following: The biologicals and pharmaceuticals of: Haver-Lockhart Laboratories, Corn States Laboratories, Fromm Laboratories and many others. We will also feature Prescription Diets as originated by Dr. Mark L. Morris. Booth 20.

CHEM-TECH, INC.

This Memphis, Tennessee, firm, represented on the Pacific Coast by Mel Hutchinson, cordially invites you to visit their display, being shown to CVMA members for the first time. Booth 37.

CHICAGO PHARMACAL COMPANY

Displaying URISED, available in both tablet and bolus form; CANITONE, a tablet combination of androgen and estrogen coupled with metabolic regulators for dogs of all ages; and LOBASCON, an effective antitussive agent in tablet form for treating acute cough. Booth 34.

CIBA PHARMACEUTICAL PRODUCTS, INC.

We will display Ultracortenol — long-acting corticosteroid for intramuscular and intrasynovial injection. Booth 33.

COCA-COLA

The Coca-Cola Bottling Company of California will have two very attractive booths for the free dispensing of their world-famous product. Booths 3, 4.

CUTTER LABORATORIES

We plan to exhibit a general display of our veterinary biologicals and pharmaceuticals. Booth 15.

DIAMOND LABORATORIES CO.

Diamond Laboratories will display a complete line of small and large animal biological products, including: D-TERG with Thiofen, detergent, shampoo and lubricant; SEROGEN—Canine distemper-hepatitis, leptospira canicola antibodies, obtained from the blood

of dogs hyper-immunized with canine distemper virus, infectious canine hepatitis virus and leptospira canicola organims, brucella bronchisepticus, streptococcus pyogenes and salmonella typhimurium. Booth 40.

EATON LABORATORIES

Exhibiting Furaspor® Liquid Veterinary, an ideal topical agent for dermatoses; clinically proven in seborrheic dermatitis and pyogenic dermatitis of dogs, in dermatomycoses of dogs, cattle, and horses, intertrigo of cattle and as an adjunctive therapy in demodectic mange of dogs. Booth 28.

EISELE & COMPANY

Eisele & Company will exhibit their line of hypodermic syringes both glass and metal veterinary type, hypodermic needles, clinical thermometers, suture needles and surgical instruments. You are invited to our booth and learn of our direct selling policy which means savings to you. Booth 29.

ENCYCLOPAEDIA BRITANNICA

ENCYCLOPAEDIA BRITANNICA, INC.: EB's Biggest Revision in a quarter of a century! The new 1960 Edition of Encyclopaedia Britannica, is a new milestone in Britannica's 191st year history, representing, as it does, the biggest revision—in a quarter of a century—of what has long been acknowledged as the world's most authoritative reference work. Approximately four million word changes are involved in revisions affecting over 4,000 articles. Booth 21.

ENZYME PRODUCTS

The Enzyme Products Company, Division of Blair/ Johnson, Inc., will display ACUTALYN. Booth 19.

FORT DODGE LABORATORIES, INC.

Some of the products to be displayed are: Distovax-H, Distohep, Leptospira Bacterin, Nolvasan, Nolvapent, Dictycide, Chuzits, also the practical and economical equipment desgned for the use of Halsan, the nonflammable, nonexplosive inhalation anesthesia. Come by and visit with us. Booth 49.

FOLGER'S COFFEE

This pioneer San Francisco firm will dispense free coffee during the convention. Among their other public services, Folgers sponsors all S.F. Giant base-ball game broadcasts. Between Booths 18 and 19.

FROMM LABORATORIES, INC.

We will display a complete assortment of the Quality Line of Fromm Biologicals. Among our most recent introductions to the veterinary profession, which will be displayed, will be Hepoid TC, a tissue culture hepatitis vaccine, modified live virus of canine tissue origin. Booth 47.

GENERAL MILLS, INC.

We will exhibit the following products: Sure-Champ Dog Food, Spratt's Kibble & Biscuits, Spratt's Cat Food and Three Little Kittens All Fish Canned Cat Food. Booth 8.

GIL-MEL CO.

We will display, Avianized® canine distemper vaccine, the original modified live virus vaccine vacuum-dried for maximum stability. Polyotic® Tetracycline products. Varizyme® Streptokinase-Human Plasminogen-Streptodornase, the only injectable enzyme preparation indicated for all species of domestic animals. Varizyme is for use wherever inflammation is a complicating factor in recovery. Davis & Geck sutures, Surgilope® and "Vim" products will also be featured. Booth 26.

GOSHEN LABORATORIES, INC.

Goshen displays their own products—Foot Rot Ointment, Skin Ease, Derma Calm—and other manufacturers' products—Nilodor, Timsen, Pharmatran, Panafil, Y-Mycin and others.

Also, autoclavable urethral and ureteral catheters, endotracheal tubes, surgical repair mesh, Boyd's Cattle Lifter Sling. Cadillac Hoist Winch, dependable dog dryer, and other items. Booth 38.

GREAT BOOKS OF THE WESTERN WORLD

"Great Books of the Western World," in 54 volumes containing 443 works by 74 authors from Homer to Freud spanning 3,000 years of western thought featuring the revolutionary index of ideas, "The Syntopicon" including 3,000 topics with 163,000 references to their exact location in the classification of 102 ideas. Booth 25.

T. E. E. HEARD CO., INC.

We will show our new Modular furniture by Hamilton; latest in laboratory equipment; instruments; diagnostic instruments; autoclaves and chemicals. Booth 12.

HILL PACKING CO.

Displaying "Prescription Diet®" products—premium grade ingredients in unvarying, uniform proportions; palatability, digestibility, nutritional and caloric adequacy; controlled processing and rigid line inspection to insure retention of nutrient values; quality control and clinical testing of each production batch by an independent laboratory. Booth 32.

HOSPITALITY BOOTH

The Program Committee is bringing you another innovation—a special reception booth in the Exhibit area. The booth will be staffed by the Reception Committee who will help all guests, exhibitors and members. They will provide information on places to see and go, and the best restaurants in fascinating San Francisco. Booth 6.

INSURANCE — CVMA and JAMES E. HOWARD CO.

Representatives from the insurance firms handling policies authorized by the CVMA will be on hand—National Casualty Company, E. C. Smith Company, D. W. Morris and Atkinson, Clayton & Atkinson. Also in this booth will be Mr. James E. Howard, from the James E. Howard Co., "the veterinarians' printer." Booth 54.

JENSEN-SALSBERY LABORATORIES, INC.

The Jen-Sal exhibit will feature two new and recently introduced veterinary pharmaceuticals, Jenotone and Decton, as well as the exclusive Jen-Sal products Butazolidin, Thionium Shampoo plus a number of Veterinary instruments. Booth 18.

KAL KAN FOODS, INC.

We will exhibit Lang's Clinical Formulae, Kal Kan Dog and Cat Foods and Thoro-Fed Dog and Cat Foods. Booth 30.

KIRSCHNER MANUFACTURING CO.

Kirschner Manufacturing Company will be exhibiting their line of Time-tested Glass Plastic Cages as well as instruments and equipment designed for use by the veterinary profession. We welcome you to visit us. Booth 48.

KNOLL PHARMACEUTICAL COMPANY

Knoll Pharmaceutical Company and Harry Stiers extend to you a cordial invitation to visit their exhibit. Stop in for the latest information and clinical data on METRAZOL, OCTIN, QUADRINAL, THEO-CALCIN and other Knoll veterinary drugs. Stop in just for a relaxed visit so we can get to know each other better. Booth 10.

ARTHUR E. LOOK, INC.

Arthur E. Look, Inc., will exhibit for the first time its new line of Veterinary Hypodermic Needles, made of stainless steel with a smooth hollow ground point for gentle penetration. All needles are ultrasonically cleaned. The extra large Luer lock hub makes this needle easy to use under the most difficult conditions. Also on display will be Look's popular Vet-Pak line of sterile catgut sutures, manufactured from first quality hospital catgut and conveniently packaged for veterinary use. We invite all in attendance to visit us. Booth 16.

THE S. E. MASSENGILL COMPANY

The S. E. Massengill Company is featuring Hemostop (Lyophilized) — the systemic hemostat especially formulated for veterinary use; for intramuscular injection. Hemostop is a specific for conditions characterized by increased capillary permeability and bleeding from a broad capillary bed. In addition, complete information will be available on the Daribiotic Family of broad spectrum antibiotics in several forms—Daribiotic Injectable, Daribiotic Tablets, Daribiotic Soluble Powder, Daribiotic Tablets, Daribiotic Soluble Powder, Daribiotic 7.5 cc tubes and 100 cc vials. This preparation is bactericidal as well as fungistatic. You are cordially invited to visit the Massengill booth for information on these and other products in our line and pick up the gift available to all veterinarians. Booth 52.

MERCK & CO., INC.

Merck Veterinary Products exclusively for the Profession: Antibiotics, Anesthetics, Anthelmentics, Biologicals, Antihistaminics, Sulfonamides, Corticosteroids, Diuretics, Vitamins, and other products for use by veterinarians. Booth 9.

NORDEN LABORATORIES, INC.

Norden Laboratories, Inc., takes pleasure in being with you for another California Veterinary Medical Association Convention. We wish you continued success and invite you to visit our representatives to discuss the veterinary specialties now available through the combined efforts of Smith, Kline & French and Norden research. Booth 43.

PACIFIC SILVER X-RAY CO., INC.

This firm will have (1) a film display, (2) X-Ray accessory items, illuminators, aprons, gloves, etc., (3) Pictures of equipment and (4) Literature and information on various types of X-Ray equipment. Booth 57.

PARKE, DAVIS & COMPANY

Parke, Davis & Company will feature two of their specialties: Chloromycetin®, a broad-spectrum antibiotic; and Surital® Sodium, and ultrashort-acting anesthetic. Included will be Chloromycetin in its many forms (oral, parenteral, opthalmic) and the various sizes of Surital. Also being exhibited will be their new long-acting sulfonamide, Midicel®. Booth 42.

PFIZER LABORATORIES

The Pfizer Laboratories' display has been specifically arranged for your convenience and to give you the maximum in quick service and product information. To make your visit worthwhile, technically trained Medical Service Representatives will be on hand to inform you of the latest developments in Pfizer Research. Booth 41.

PITMAN-MOORE COMPANY

The Pitman-Moore Company, Division of Allied Laboratories, Inc., will be displaying pharmaceuticals and biologicals of interest to both large and small animal practitioners. Products on display will include Intravenous Whipcide; the first intravenously administered anthelmentic for intestinal parasites, Globulon; the most potent purified fraction of canine antibodies, and Bactrovet; a new antibacterial clinically effective with a once a day dose. In addition, our representatives will be happy to discuss the latest research developments from Pitman-Moore including information on tissue culture distemper vaccines. Booth 44.

QUAKER OATS COMPANY

Product display of: Ken-L-Ration—"Inspected and Certified by U. S. Department of Agriculture as a normal maintenance dog food." Ken-L-Biskit—Kibbled (small broken pieces)—"The Dog Food of Champions." Ken-L-Meal—Complete Dog Dinner—Instant—Taste Tested—"the meal that shouts—EAT-EAT." Ken-L-Treats—Six individual shapes, flavors and colors; meat, milk, egg, fish, cheese and bone. "Snack time is 'Treat' time." Ken-L-Burger—A high meat protein, vitamin and mineral supplement. "U. S. Government Inspected." Puss n' Boots Contains whole fish (including protein-rich fillets). "A complete balanced-diet food for Cats." Booth 11.

RALSTON PURINA COMPANY

This St. Louis Company's institutional booth depicts Ralston Purina Company's broad interests in animal agriculture. Booth 39.

RESEARCH LABORATORIES, INC.

We of Research Laboratories are proud to announce the establishment of a direct sales program in California. You are cordially invited to visit our booth and discuss with our representatives our full line of large and small animal biologics and pharmaceuticals. Booth 53.

SANI-CAGE DISTRIBUTING COMPANY

Sani-Cage Distributing Co., originators and developers of the high quality line of Sani-Cages, will be featuring their newly designed models of both stainless steel and galvaneal cages, with improved interior design eliminating seams and with improved latching mechanism, reducing difficult door cleaning. See the new Super-Dryer. At the booth to greet you: Howard Bymel. Booth 50.

SCHERING CORPORATION

Schering Corporation will display AMP-VAC Biologicals, AZIUM Boluses, AZIUM Injection, AZIUM Tablets, DIATHAL, FULVICIN, METICORTEN, METIDERM Aerosol. Booth 31.

SCHROER MANUFACTURING COMPANY

"SHOR-LINE" invites all those attending to visit the display of Instruments, Kennels and Operating Tables. Of particular interest will be the new Operating Table with stainless top and base, and the versatile Animal Cages, with new and exclusive features, which are easily adaptable to individual or small hospital use. Booth 17.

STANDARD SURGICAL COMPANY

The following are some of the items we plan to exhibit at the convention: Instruments, Syringes, Thermometers, Suture Needles, Sutures, Hypo Needles, Otoscopes, Knife Blades, Bone Pinning Supplies, Dressings, Surgical Lights, Sterilizers, Equipment, etc. Booth 22.

STANTON SCIENTIFIC EQUIPMENT CO.

Interesting demonstrations of mechanical resuscitation and controlled respiration will be shown. A plastic breathing dog will be of interest to veterinarians visiting this exhibit devoted to the art of mechanical respiration. Booth 5.

E. R. SQUIBB & SONS

E. R. Squibb & Sons has long been a leader in development of new therapeutic agents for prevention and treatment of disease. The results of our diligent research are available to the Medical Profession in new products or improvements in products already marketed. Booth 7.

U.S. VITAMIN & PHARMACEUTICAL CORP.

NEW—on display—V N C (Veterinary Nutritional Conditioner)—scientifically balanced for small ani-

mals formula . . . containing vitamins, minerals, bioflavonoids and lipotropics. V N C Power is packaged in 150 gm. jars with tear-off dispensing label sold to graduate Veterinarians only. Booth 45.

THE UPJOHN COMPANY

The veterinary division of The Upjohn Company, Kalamazoo, Michigan, will display pharmaceuticals and biologics for small and large animals. Booth 46.

VALLEY VETERINARY SUPPLY

The Valley Veterinary Supply will feature the specialty products of Ethical Veterinary Supply Co.— the latest is Arazone for removal of Tapeworms! Also featured will be products of Norden, Fromm, Schering, Pfizer and many others.

Petrotone is a Valley Veterinary Supply specialty which is being used more and more for a laxative and tonic for cats and dogs! Booth 1.

WINTHROP LABORATORIES

Winthrop Laboratories will feature Milvonique, the new skin preparation for the treatment of sarcoptic and demodectic mange; Pluraxin Syrup, a vitamin food supplement and a new Medicated Shampoo. In addition, other Winthrop originals such as Demerol, Phisohex, Roccal and so forth will be displayed. Booth 11A.

Col. Foster Hunts Tigers in Viet Nam

Colonel and Mrs. Robert J. Foster left San Francisco late in March for Bangkok to spend several months sightseeing in the Far East. Most of the trip will be by air.

His itinerary—which includes time out for a Bengal tiger hunt in Viet Nam from the sanctuary of an elephant's back—is as follows: Cambodia, Saigon, Viet Nam, then back to Manila; then Hong Kong and back to Manila; thence to Tokyo to do some traveling in Japan before flying back to the U.S.

The Fosters return in time for the June Convention in San Francisco. Col. Foster will install the officers of the CVMA at the June meeting.

Calif. Animal Industry Conference October 17-18

The California Animal Industry Conference will be held at the Fresno Memorial Auditorium, October 17-18. Dean Donald E. Jasper, School of Veterinary Medicine, Davis, is a veterinary member of the program committee.

Dr. Jacob Traum, retired U. C. professor of veterinary science, was recently awarded the Animal Health Institute's fourth annual Distinguished Service Research award.

Your CVMA Committees in Action

Executive Committee—Composed of Doctors Ozanian, Braun, Houchin, Collinson, Putney, Stowe and Roberts, your Executive Committee met for the third time this year in the Executive Secretary's office on April 2. They discussed and analyzed the various problems to come before the House of Delegates in June.

Program Committee—Your Program Committee, composed of Dr. R. L. Collinson, chairman, and Doctors Ferreira, Eisenhower, Dickson, Vierheller, Stansbury, Walker, Reid, Crundwell and Brown, made their final plans for the June meeting. This group has spent many hours together on numerous occasions planning for this meeting.

Public and Professional Relations Committee-Under the chairmanship of Dr. John B. Carricaburu this committee has done an exceptionally fine job this year. (See report on page 20 of the March-April California Vet-ERINARIAN.) Recently Dr. Ozanian appointed a subcommittee of this group, composed of Dr. Carricaburu, chairman, and Doctors Ommert, Linfoot, Humphrey, Burger, Frier and General Kester (to serve in an advisory capacity) to work with the California Thoroughbred Breeders Assn. This committee will try to solve some of the many problems that are paramount at this time. The group met recently on the Ranchero Visitadores Ride and will have a full report for the House of Delegates.

Rabies Committee—On May 8 this group, composed of one member from each constituent association, met in Fresno. Present: Dr. Fink, chairman, and Doctors Ozanian, Dean, Hand, Donnelly, Sherwood, Boetger, Barr, Scott, Meyer, Vowles, Braun, Silver, R. L. Collinson and Maeda. They will present the results of the meeting to the House of Delegates in June.

Finance Committee—Composed of Dr. Loris Johnson, chairman, and Doctors Condon, Bland, Cope and Roberts, held the third quarterly meeting of the Finance Committee in the Executive Secretary's office March 9. They reviewed all association expenditures, income, etc. They found the association's finances in good shape. They will meet again in June to prepare a report to the Executive Committee and the House of Delegates.

Membership Committee — This committee, with Dr. Putney as chairman, and composed of the Secretaries of each constituent association, has just lunched a statewide membership drive. Every member of the state association is urged to contact all nonmembers in their area and ask them to join.

Mastitis Committee—This committee, composed of Dr. Hubbard, chairman, and Doctors Cornelius, Payen, Whitman, McKay, Lundberg, Bryner, Koebel, Ferreira, Jessup, Bunker, Ackermann, Haight, Wallis and Pier, met in Davis in February and have held numerous subcommittee meetings since. They will have a full report in June.

Insurance Committee—This committee, composed of Dr. Barsaleau, chairman, and Doctors Butchart, Chudacoff and R. A. Stiern, are awaiting the final analyzation of the insurance questions on the Economic Survey questionnaire, and will have a full report for the House of Delegates in June.

Ethics Committee—This committee, under the chairmanship of president-elect Dr. Braun, is composed of Doctors Reid, Kanawyer and Brazil. They have received several requests for advice and have been busy during the past few months. At present they are in the process of preparing a report for the Executive Committee and the House of Delegates.

Ways and Means Committee—Dr. Ommert is chairman of this committee, with Doctors Schroeder, Proctor, Ott, Crenshaw and Norton. They have been busy studying new resolutions to come before the House of Delegates in June. They plan to meet again in advance of the June meeting.

Legislative Committee—Under the chairmanship of Dr. Ormsbee, with Doctors Steinmetz, McSpadden, Harry, Craige and Pulling, this committee met in February and will have a full report of their activities in June. Doctors Ormsbee and Craige represented the Association at a Public Health League meeting on May 8, and will report on that meeting.

Special House Committees-1. Committee to investigate the possibility of having only one meeting a year. Dr. Putney, chairman, with Doctors Crenshaw, Thomas, Hand and Jasper. This committee met May 6 in Sacramento and will have a full report for the Executive Committee and House of Delegates in June. 2. Committee to investigate the duties of the Farm Advisors. Chairman, Dr. Plocher, with Doctors Ackermann, Melvin Roberts, Hoadley, Pulling, Erickson, Barsaleau, Dedrick, McKay, Krum and Kelly. Each member has made a full report of the activities in his area and a meeting was held May 19 in the Executive Secretary's office. Dr. George Alcorn, director of the Agricultural Extension Service, and Dean Jasper attended the meeting. A full report will be compiled for the Executive Committee and the House of Dele-



THIONIUM SHAMPOO

Unquestionably, the Most Luxurious Shampoo Available...

WITH EFFECTIVE THERAPEUTIC ACTION!

- ... Abundant, Long-Lasting, Free-Rinsing Suds with a Delightful, Pleasing Aroma!
- ... TWO Powerful Detergents for Superlative Cleansing Action!
- ... Deep-Penetrating Treatment of Nonspecific Dermatoses, Seborrheic Dermatoses, Eczemas and Fungal Skin Infections! Contains Stabilized Sodium Polythionates for "Heart of Sulfur" Therapy!
- ... Distinctively Packaged in 6 oz. Polyethylene "Squeeze"
 Bottles for Dispensing! Conveniently in 1-gallon Plastic
 Bottles for Hospital Use!

When frequent, localized treatment is indicated, use Jen-Sal Thionium Solution.



ORDER FROM YOUR JEN-SAL BRANCH OR REPRESENTATIVE

Jensen-Salsbery Laboratories, Inc. P. O. Box 167, Kansas City 41, Mo.



Laboratory Notes

From the Department of Clinical Pathology, School of Veterinary Medicine, Davis, California

Screening Test for Adrenocortical Insufficiency

A large number of tests which will aid in the diagnosis of adrenocortical insufficiency are available to the veterinary clinician. These would include determination of serum electrolytes and proteins, plasma glucose, urinary steroids, renal function tests and EKG, as well as the complete blood count (CBC). These tests provide valuable corroborative evidence of the disease but generally require extensive laboratory facilities. Also, the nonspecific nature of these tests has led to the development of special tests of adrenocortical function in man, the most common of which is the response of the circulating eosinophils to injection of ACTH or Epinephrine. This test has been modified for use in the dog1 and has recently been employed in a case of primary adrenocortical insufficiency2. The eosinophil test is based upon the finding that after the I.M. injection of 10 i.u. ACTH, consistent decreases in the absolute eosinophil counts occurs in the presence of a functional adrenal cortex.

Technique

- 1. Pre-injection blood sample (heparinized) for eosinophil count.
 - 2. Inject 10 i.u. ACTH I.M.
- Seven hours post injection, obtain blood sample for eosinophil count. (If desired, blood samples may be obtained at frequent time intervals.)

Eosinophil Counting (Direct Method)

1. Diluting Fluid: The most satisfactory diluting fluids contain propylene glycol as a vehicle and phloxine to stain the cells red. "Pilot's Solution" consists of:

Propylene	glycol .		 	50 ml
H ₂ O			 	40 ml
1% Phloxi	ne in H ₂ C) .	 	10 ml
10% Sodiu	m Carbon	nate		1 ml

A special fluid for dogs has been described^a:

 $\begin{array}{cccc} H_1O & & & 50 \text{ ml} \\ Eosin & & .25 \text{ gm} \\ Phloxine & B & .25 \text{ gm} \end{array}$

Mix well, then add 50 ml propylene glycol and mix. A few drops of concentrated formalin may be added as a preservative. This solution may be used immediately without filtration.

2. Counting: Blood is drawn to the 1.0 mark on a WBC pipet and diluted to the 11 mark. After mixing, the pipet is allowed to stand for 15 minutes. The pipet is then shaken again and after the first four drops are expelled, the counting chamber is filled and the cells allowed to settle for 5 minutes. The entire ruled area of the chamber is counted and the number of eosinophils/mm* is the

number counted multiplied by the factor 11.1.

Eosinophil Counting (Indirect Method)

An estimate of the number of eosinophils may be obtained from the % distribution of the eosinophils on a Wright's stained blood smear and the total WBC count. The irregular distribution of eosinophils on a smear makes this method less accurate than the direct method. A total WBC count and a 500-cell eosinophil differential count is made for each blood sample. The number of eosinophils may be obtained by:

 $\frac{Eos}{500 \ WBC} \ X \ WBC/mm^3 = Eos/mm^3$

There is an inconstant tendency to lymphocytosis and eosinophillia in Addison's disease of man. Eosinophillia has been observed in the disease in the dog.² The initial screening of cases of suspected adrenocortical insufficiency may be accomplished by the indirect method. It has been proposed that a fall in circulating eosinophils of 70% or more within 7 hours after injection of ACTH be considered indicative of satisfactory adrenocortical function.¹ Little or no decreases in circulating eosinophils then would provide a basis for further laboratory investigation in order to establish the diagnosis.

J. J. KANEKO

References

¹Martin, J. E., Skillen, R. G., and Deubler, M. J.:
"The Action of Adrenocorticotrophic Hormone on Circulating Eosinophils in Dogs—A Proposed Screening Method for Evaluating Adrenal Cortical Function," Am. J. Vet Res., 15:489 (1954).

²Marshak, R. R., Webster, G. D., Jr., and Skelley, J. F.: "Observations on a Case of Primary Adrenocortical Insufficiency in a Dog," J.A.V.M.A., 136:274 (1960).

³Farrington, E. M., and Jetter, W. W.: "An Improved Staining Solution for Counting Eosinophils in Dogs," Am. J. Clin. Path., 23:836 (1953).

Sen. Humphrey Introduces Bill for Grants to Veterinary Schools

Senator Hubert Humphrey recently introduced legislation to authorize a ten-year program of Federal grants to help finance construction of additions to existing veterinary schools and add new schools.

The Humphrey Bill, intended to relieve the growing shortage of doctors of veterinary medicine, would authorize \$5 million a year for the next five years to expand and improve existing schools and \$1 million a year for the next ten years for construction of new schools.

The existing veterinary schools graduate 850 annually. That is not enough, Senator Humphrey said. We need 1,200 graduates annually to reach the estimated need of veterinarians 15 years from now.



DR. WILLIAM E. STEINMETZ Third Vice-President

Election Results

CVMA OFFICERS FOR

1960-1961



DR. J. B. CARRICABURU Alternate Delegate.* AVMA

The five members whose names appear below were duly appointed and met as official tellers in the CVMA office at 10 a.m., Saturday, April 2, 1960, as prescribed in Article XIV. Constitution and By-Laws:

The following doctors were elected as officers of CVMA for the fiscal year 1960:

PresidentEDWARD R. BRAUN (Elected in the 1959 election)

President-Elect ERNEST H. HOUCHIN

*To fill unexpired term of Dr. F. B. Pulling, Jr.

First Vice-President.... RALPH L. COLLINSON
Second Vice-President WILLIAM W. PUTNEY
Third Vice-President...WILLIAM E. STEINMETZ

The official records and ballots of the 1960 election are kept on record in the Executive Secretary's Office for one year, and are available for inspection by all members.

Respectfully submitted,

By W. L. KANAWYER, Chairman Board of Tellers

A. L. GILGER JOSEPH M. ARBURUA
B. M. McWhinney Edward C. Bland
Members of the Board

Tranquilizers on Beef Cattle

University of California animal scientists at Davis and farm advisors in various counties report that "no significant gains" in weight have resulted from feeding or injecting tranquilizers to beef cattle in four experimental trials.

Scientists in several other states also have collected evidence indicating that the value of transquilizers as a feed additive is questionable.

Tranquilizers—one of the newest gain-getters to be boosted for the cattleman's already bulging medicine cabinet—just aren't producing the extra pounds claimed by salesmen, said Dr. M. T. Clegg, Davis physiologist. This is in sharp contrast to other published information, in which beef gains "up to 27 per cent" have been claimed.

The evidence of California trials is certainly not conclusive, said Clegg, but results are so consistently negative that it is reasonable to doubt that tranquilizers will ever regularly approach the value of other well established practices. Clegg pointed out that most of the University's work has been with the injectable tranquilizers. In two trials the drug was fed

to the animals. In neither case were tranquilizers beneficial.

Although tranquilizers cannot be recommended to increase beef gains, they have, in some cases, proved beneficial when used only to calm young claves under stress.

"From our work with tranquilizers it appears to us that the drugs will find their greatest usefulness in reducing excessive excitement in calves being weaned or transported," said Dr. P. C. Enge, Extension veterinarian at Davis.

AAHA Meeting in Boston Attended by 550 Practitioners

The 27th annual meeting of the American Animal Hospital Assn., held in Boston in April, attracted 550 practitioners. Dr. Brian Singleton, a London practitioner, was one of the featured speakers. He discussed stifle conditions in the dog and small animal anesthesia.

Dr. J. G. Hardenbergh was presented the Morris Award, and Donald C. Van Riper, Kansas State University, won the Moss Award.

Next year's meeting of the AAHA will be held in St. Louis, April 18-21.

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SCVMA Symposium Attracts 500

On March 15-16. the Southern California Veterinary Medical Association conducted a two-day symposium in the Ambassador Hotel, Los Angeles. Attendance was almost 500.

Starting with the large animal session on March 15 where the subjects "Corrective Shoeing in Horses" and "Differential Treatment of Hind



DR. WILLARD OMMERT Chairman

Leg Lameness in Cattle" were excellently covered by Dr. James Neal and Dr. O. R. Adams, respectively, to the small animal ses-



DR. ROBERT J. SCHROEDER President, SCVMA

Jacob Markowitz.

sion on March 16 which covered "Abdominal Surgery," those attending were overwhelmingly agreed that this symposium had to be rated among the top programs presented on veterinary medicine.

Speakers on "Abdominal Surgery" were Doctors Mark W. Allam, W. A. Lumb, C. Lawrence Blakely and

In addition to SCVMA members, veterinarians from throughout the state, and from Oregon, Colorado, Arizona and Nevada attended.

Dr. Willard D. Ommert, past president of the SCVMA, was chairman of the Symposium. Dr. Robert J. Schroeder is president, SCVMA.

Gil-Mel Company Enters Veterinary Field

The Gil-Mel Company of Santa Rosa was recently formed for the distribution of fine chemicals, biologicals, pharmaceuticals and equipment used in veterinary hospitals. Sales will be confined to licensed veterinarians only. Quality will not be sacrificed for a price, they state; however, with proper use of buying power economy as well as quality and service will benefit the veterinarian who requests their services. Personal contact will be made with the veterinarians by owner-salesman, Gilbert A. "Cap" Captanian.

Ninety-seventh Annual Meeting of the AVMA

Denver, Colorado, is expected to attract more than 4,000 veterinarians, members of their families, exhibitors and guests from August 14-18, 1960. Exhibits will open in the Denver Municipal Auditorium on Sunday, August 14; the opening session of the 97th Annual Meeting of the American Veterinary Medical Association will be held on the morning of August 15.

Convention Program

The largest scientific program ever scheduled will include 111 scientific papers, panels and closed-circuit television demonstrations. Over 35 specialty groups also plan to hold meetings at various times during the Convention.

Host City

Cool nights, clear days and magnificent scenery are attractions which have contributed to Colorado's reputation as "America's Vacationland." The capital city of a Rocky Mountain Empire, Denver has made good use of the nearby mountains with an extensive park system offering facilities for picnics, golf, fishing and horseback riding.

Hotels and Housing

The Denver Hilton, the nation's newest hotel and a spectacular addition to Denver's modernistic skyline, will serve as the AVMA headquarters hotel. Seventeen additional first class hotels within a mile of the Municipal Auditorium are available to those attending the convention. In addition numerous motels surround the city for those planning to come by car. Requests for hotel accommodations are being handled through the Denver Convention and Visitors' Bureau, 225 West Colfax, Denver 2, Colorado.

Plastic Surgery for Animals

Veterinary practitioners attending the 52nd annual conference for veterinarians at the New York State Veterinary College heard Dr. Robert P. Knowles of Miami describe uses of plastic surgery on small animals.

Dr. Knowles urged practitioners to adapt many of the simple techniques commonly employed on humans by plastic surgeons. The use of the "Stent" suture to obliterate dead space and minimize facial and other scars in human surgery, for example, has become standard in other than plastic surgical procedures, Dr. Knowles said.

Antibiotic Levels in Milk Following Intrauterine Infusion

J. W. KENDRICK, D.V.M., and A. C. PIER, D.V.M.

School of Veterinary Medicine, University of California, Davis

The importance of preventing the adulteration of market milk with antibiotics has recently placed all veterinary uses of antibiotics on dairy cows under close surveillance. The intrauterine infusion of antibiotics for the treatment of endometritis is widely used, but no data appears available to indicate whether excretion through the udder occurs. Such uterine disease usually occurs during the early part of lactation when the milk flow is heavy and to discard milk following intrauterine infusion would add a significant amount to the cost of this treatment.

This experiment was designed to determine if antibiotics appeared in the milk after such treatment. The cows used in this experiment were either Jersey or Holstein. In Table I, those cows labeled with three digit numbers are Jersey, those with four digit numbers are Holstein. These cows were all in the early stages of lactation, but were sufficiently postpartum to have allowed involution of the uterus. All cows were treated on the same day and in various stages of the estrus cycle. Two of these cows were in heat.

The treatments used are listed in Table I. Infusion was accomplished by using a 20 cc. glass syringe attached to a plastic inseminating pipette by a rubber adapter. A clean pipette was used for each cow. The milk samples to be tested were collected at the milking prior to treatment and at the milkings 12 hours, 24 hours, 48 hours, and 72 hours after treatment. The samples were collected in 20 cc. glass vials, and approximately equal amounts of milk from each quarter were included in the sample. The udder was prepared for sampling just prior to milking

by washing in a 1:1000 aqueous solution of Nolvasan®. In order that none of this antiseptic find its way into the sample the ends of the teats were then washed with water and were dried with sterile gauze. Immediately after collection, the samples were placed in a freezer held at minus 10° C. Following collection of samples the cows were milked in the standard manner.

The Test for Antibiotics

The rapid disc assay method for detecting penicillin in milk, similar to that described by Arret and Kirschbaum¹ was used. The results are given in Table I. This is a standard test used in milk quality control and will detect the presence of penicillin at the rate of .05 units per cc. of milk. It will detect other antibiotics or bacteriostatic agents but these cannot be specifically identified nor have minimal inhibiting quantities been closely ascertained.

The procedure of testing was as follows: The milk remained frozen until just prior to the time of the test. The time of storage ranged from 3 to 6 days. The milk was heated to 180° F. for 3 minutes and then cooled to room temperature. Special paper discs ¼ inch in diameter were immersed in the milk samples. These were placed on standard plate count agar containing spore suspension of Bacillus subtilis prepared according to the Edition.² On each plate two control discs were also placed; one blank paper disc and one disc containing .05 units of penicillin. These test places were incubated for 3½ hours at 37° C.

(Continued on page 28)

TABLE I-RESULTS OF THE TEST FOR ANTIBIOTICS IN MILK

			Samples were collected at these times post treatment.				
Lab No.	1 212 A* 2 217 A 3 158 A 4 1142 A 5 151 A 6 1140 B* 7 96 B 8 226 B	Pretreatment Sample	12 Hourst	24 Hourst	48 Hours†	72 Hours	
1	212	A*	_			_	_
2	217	A					_
3	158	A	_			_	_
4	1142	A	_				_
5	151	A					-
6	1140	B*				_	-
7	96	В	-			-	_
8	226	В	_	-	-	_	-
9	1162	В	denient.			-	
10	204	C*	eners.				_
11	1180	C	_			_	-
12	224	C	-				-
13	194	C	-			_	-
14	222	C					_

*A-1,000,000 units penicillin plus 1.0 gm. dihydrostreptomycin in 20 cc. sterile water. B-500,000 units penicillin plus $\frac{1}{2}$ gm. dihydrostreptomycin in 20 cc. sterile water.

C-100 mg. Embryostat® (brand of oxytetracycline) in 10 cc. sterile water.

†These samples run in triplcate.

Antibiotic Levels

(Continued from page 27)

and observed grossly and microscopically for zones of inhibition of growth of the test organism. The uniformly negative results are reported in Table I. The milk samples collected 12 hours and 24 hours post-treatment being the ones most likely to contain the antibiotic were tested in triplicate; samples collected at 48 and 72 hours after treatment were tested singly. On all plates the penicillin control discs showed zones of inhibition of the test organism, but none of the paper blanks or the discs containing the milk samples gave detectable zones of inhibition when examined grossly or under 30x magnification.*

Summary

Penicillin, dihydrostreptomycin and oxytetracycline were used in the doses and manner commonly employed for the treatment of endometritis. These antibiotics were not detected in the milk following treatment and therefore, it is unnecessary to withhold from human consumption milk from cows treated in this manner.

Bibliography

¹Arret, B., and Kirschbaum, A.: "A Rapid Disc Assay Method for Detecting Penicillin in Milk," Journal of Milk and Food Technology (Nov., 1959), 329.

"Standard Methods for Examining Milk and Dairy Products, 10th Ed. Published by American Public Health Assn.

*We are indebted to Mr. C. Stucker, Bureau of Dairy Service, State of California, for his help and direction in conducting the disc assay test.



Chinatown by day or after dark is one of the lures of San Francisco during convention season.

Who's Who . . . in California

Dr. Donald E. Barr, Fresno, has recently been appointed a member of the California State Board of Examiners in Veterinary Medi-



DONALD E. BARR

cine. An active CVMA member and former officer of the Central California VMA, Dr. Barr is also president of the Fresno Museum of Natural History and Junior Museum

The Fresno Museum is the newest of California's smaller museums, according to Dr.

Barr, and the largest project to date is the nearly completed aquarium and terrarium, which will house a collection of live fish and reptiles, native to that area, which will be of great interest to students, sportsmen and visitors.

Dr. Barr is also a member of the California School Boards Association. He received his D.V.M. degree from Colorado in 1940.

Applicants

David R. Barnett, South San Francisco. Vouchers: Charles H. Ozanian, W. W. Putney. William E. Barr, Petaluma. Vouchers:

Charles H. Ozanian, W. W. Putney.

Royal Thair Carver, Carmichael. Vouchers:

Charles H. Ozanian, W. W. Putney. George L. Humphrey, Richmond. Vouchers: Charles H. Ozanian, W. W. Putney.

Graham Elmore Kemp, El Cerrito. Vouchers: Ben Dean, W. W. Putney.

Edward L. Kirkland, Anaheim. Vouchers: C. Ross Dean, Charles H. Ozanian.

J. C. McIntyre, Hamilton AFB. Vouchers: Tom McIntyre, Howard Carroll.

John Ernest Norberg, Downey. Vouchers: Charles H. Ozanian, O. A. Warner.

Robert S. Spalding, San Jose. Vouchers: Charles H. Ozanian, W. W. Putney.

Harold P. Lapesarde, Los Angeles. Vouchers; Charles H. Ozanian, W. W. Putney.

Orville B. McRory, San Francisco. Vouchers: Howard Carroll, Kenneth Crampton.

James R. Ebaugh, Gilroy. Vouchers: Charles H. Ozanian, W. W. Putney.

Robert W. Olsen, San Jose. Vouchers: Charles H. Ozanian, W. W. Putney.

Frank E. Miller, Carmel Valley. Vouchers: Ralph Weston, Clinton Bryner.

Arno Witschard, Davis. Vouchers: Charles H. Ozanian, W. W. Putney.

Adding Vitamin Mineral Supplements to Feeds for Better Gains and Feed Efficiency

FRANK J. CAMPBELL, D.V.M., Practitioner, Bieber, Calif.

This paper describes a trial the purpose of which was to determine whether or not the addition of a vitamin-mineral* supplement to the feed would increase rate of gain and feed efficiency of a group of purebred Hereford bulls.

Materials and Methods

In this test two groups of young purebred Hereford bulls were fed in separate lots on the same feed. One group of 10 head consisted of spring calves; the other group of 14 head of fall calves. The feed consisted of home grown grain (whole oats and barley) and native swamp or meadow hay. Both groups were weighed at the beginning and end of the feeding. The feed was also weighed and the amounts fed were recorded.

The vitamin-mineral supplement was in the form of a 3/16" alfalfa meal base pellet. This was added to the grain at the rate of 1 lb. of vitamin-mineral supplement to 100 lbs of grain. These bulls were hand-fed daily and the amounts fed were recorded. The trial period covered 67 days on feed, February 18 to April 26, 1959.

Table I shows the numbers of bulls, weights at beginning and end of trial, gains, and feed consumption.

Result

The controls made a gain of 1.77 lbs. per day and the vitamin-mineral supplements made 2.44 lbs. per day. The vitamin-mineral supplements therefore made an additional gain of 0.67 lbs. per day over the controls, or 37.8% more than the controls. Table II shows the gains per lb. of feed.

It took an additional 1.26 lbs of grain and 2.08 lbs. of hay for the control group as compared to the vitamin-mineral supplemented group to make a pound of gain. This would indicate a better feed efficiency for the vitamin-mineral supplemented group, an efficiency of approximately 47% over the controls.

The feed efficiency of the two groups was also compared on the basis of total digestible nutrients.* Table III shows this comparison.

Table III shows that the vitamin-mineral supplements made 1 lb. of gain on 1.72 less lbs. of TDN. Again this indicates a greater feed efficiency for the V-M supplemental bulls.

Discussion

This test was conducted in an area where little or no feeding is done on the basis of balanced or complete rations. Calves are win-

(Continued on page 30)

-					- 7
	Α	23	Ŧ.	E	- 1
*	Z3	D	B.	Sec.	- 4

Controls		Weigi	ht, Lbs.		Lbs. G	ain	Grain	Hay
10 Head	Feb.	18	Apr.	26	for 67 I	Days	Lbs. Per Day	Lbs. Per Day
	8,380 838	T. Av.	9,570 957	T. Av.	1,190 119	T. Av.	64 T. 6.4/hd.	120 T. 12/hd.
V-M Fed 14 Head	8,120 580	T. Av.	10,410 743.5		2,290 163.5		80 T. 5.7/hd.	160 T.

TABLE II

	Grain Per Lb. of Gain	Hay Per Lb. of Gain	Total Feed Per Lb. of Gain
Controls	3.60 Lbs.	6.76 Lbs.	10.36 Lbs.
V-M Fed	2.34 Lbs.	4.68 Lbs.	7.02 Lbs.

TABLE III

		TABLE III		
	TDN, Lbs.	Gain, Lbs.	1 Lb. TDN = 5.3 Cents	
Controls	5.26	1	\$ 0.278	
V-M Supplements	3.54	1	0.176	
Difference	1.72	1	0.102	

^{*}The vitamin-supplement "BuAlfa Vite" was purchased from H. C. Burns Co., Inc., Oakland, Calif.

^{*}Computed from Feeds and Feeding, Morrison, 20th Ed., Composition and TDN of Feeds.

Vitamin Mineral Supplements

(Continued from page 29)

tered in this area for the most part on meadow hay or a combination of meadow hay with some alfalfa and a few pounds of grain per day. Cows are wintered on hay alone. It was believed that, by the addition of a vitaminmineral supplement to the home grown grains and/or hay, better rates of gain could be obtained.

On one ranch where Vitamins A and D are added to a bonemeal, salt and cottonseed meal mix and fed free choice the cows winter better, show more bloom, and seem to have more vigorous calves in the spring. This leads me to believe that the addition of such a vitaminmineral supplement is needed in this type of range area. The cost of supplementing shows a profitable return, as indicated in Table III.

Criticism

After completing this trial and consulting a statistician the writer was made aware of the fact that individual weights of the animals involved should have been made. However, the statistician felt certain that the difference in gain per day and feed efficiency was statistically significant.

Summary

Two groups of purebred Hereford bulls were fed the same feeds with the exception that one group had a pelleted vitamin-mineral supplement added to their grain at the rate of 1 lb. vitamin-mineral to 100 lbs. grain. The vitamin-mineral supplemented group showed a significantly better rate of gain and feed efficiency.

Among other things . . .

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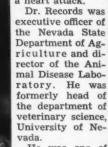
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Dr. Records, Nevada, Passes Away

Dr. Edward Records, 73, died May 13 in his laboratory office on the University of Nevada

campus. Death was attributed to a heart attack.



He was one of the discoverers of the cause and cure of "Red Water"

DR. EDWARD RECORDS of "Red Water" disease in cattle, which at one time threatened the Nevada live-

stock industry.



Eleventh Annual Animal Care Panel

The Animal Care Panel will hold its 11th annual meeting at the Sheraton Jefferson Hotel, St. Louis, Missouri, October 26-28, 1960. The Animal Care Panel is a non-profit, educational organization composed of persons and institutions professionally engaged in the production, care and study of laboratory animals. All scientists, laboratory animal technicians, equipment manufacturers, food producers, veterinarians, animal caretakers and others interested in the rearing of laboratory animals have been invited to attend.

There will be a scientific program covering a wide range of subjects including animal housing, breeding, disease control and special equipment used in the rearing of animals. There will be both scientific and commercial exhibits.

The chairman of the local committee is Dr. James Corbin, of the Ralston Purina Company, 835 S. 8th Street, St. Louis 2, Missouri. For further information, programs or exhibit information contact Dr. Robert J. Flynn, secretary of the Animal Care Panel, Box 299, Lemont, Illinois.

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AT EATON CONFERENCE: Dr. Erwin Sage, Asst. Health Officer, San Francisco; Dr. H. E. Paul; Dr. Harold Roberts; Dr. L. O. Johnson.

The Eaton Conference on the Nitrofurans in Veterinary Medicine, held April 1 in the Fairmont Hotel, San Francisco, was well attended by veterinarians from all over California and from some of the adjoining states.

Dr. Loris O. Johnson, president of the BCVMA, which sponsored the meeting; Dr. Tom D. Harris, past president BCVMA, and Dr. N. T. Freid assisted with arrangements for the general session and the large and small animal sessions. Officials of Eaton Laboratories were very generous in their praise to these men for their efforts in making the fourth regional conference so outstanding.

The following speakers presented papers: Dr. Glenn E. Taylor, Modesto; Dr. M. J. Pelczar, University of Maryland; Dr. Henry E. Paul, Eaton Laboratories; Dr. S. A. Peoples, Davis: Dr. E. W. Ellett, Texas A. and M. College; Dr. D. L. Piermattei, Michigan State University; Dr. W. D. Carlson, Colorado State University; Dr. S. M. Michaelson, University of Rochester; Dr. R. J. Nelson, Milwaukee; Dr. Wm. V. Lumb, Michigan State University; Dr. R. F. Vigue, Nasson College; Dr. Richard M. Witter, Columbus, Ohio; Dr. M. F. Andrews, North Dakota Agriculture College, and Dr. C. K. Roe, Ontario Veterinary College.

New Book on Nutrition and Diet

The rapid expansion and development of clinical nutrition in small animal practice has prompted the publication of a book "Nutrition and Diet in Small Animal Practice," by Dr. Mark L. Morris.

The 217-page volume is designed for the practicing veterinarian, the veterinary student and those concerned with the more effective application of nutrition in the diagnosis and management of diseases of the dog and cat.

Included are chapters on hospital feeding, reproduction of the canine and feline and nutritional information as it relates to specific diseases of the dog and cat.

The book is published by Mark Morris Associates, 510 Mile High Center, Denver 2, Colorado.

"Flower Dollars" for Women's Auxiliary

"Flower dollars" sent to the Loan and Scholarship Fund of the Women's Auxiliary to the CVMA will honor the memory of your beloved, deceased friend with dignity and propriety in a very real and lasting way, as these dollars are used over and over to help worthy and purposeful young people who will be a credit to the veterinary profession.

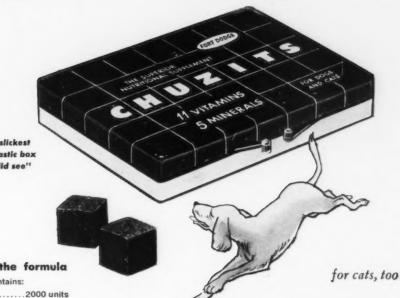
The Women's Auxiliary has on hand a supply of beautifully printed acknowledgments which will be sent immediately to the bereaved relatives of your deceased friend when such lasting memory donations in his name are sent to them for the loan fund.

These memorial gifts may be sent either to the Executive Secretary of the CVMA or to our Auxiliary loan fund chairman, Mrs. Louis Johnson, 7025 Glass Slipper Way, Citrus Heights, California.

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Nicotinamide	15.0	mg.
Pantothenic Acid	500	mcg
Choline	6.8	mg.
Folic Acid	100	mcg
Vitamin B ₁₂	0.2	mcg
Calcium	130	mg.
Phosphorus		mg.
Iron		mg.
Copper	54	mcg
Cobalt		mcg
Protein		
(amino acids)		
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New Trends in Veterinary Economics*

GLENN E. TAYLOR, D.V.M., Modesto

New trends: These are two most important words whether they apply to argiculture, football, or the practice of veterinary medicine. Today, I wish to talk about our service to agriculture and by studying agricultural trends, I believe we might observe better where our path leads.

Automation, integration, specialization: to me and to many others more learned than I,



GLENN E. TAYLOR

these three words spell the direction in which agriculture is traveling. Let us take a look at these terms.

Automation is a trend which agriculture has been following closely for 20 years. More wages and benefits demanded by labor, lack of training of skilled workers and of

their willingness to do a good job have caused agriculture to create inventions that would replace manual labor. The result has been increased production, sometimes causing overproduction of certain commodities. Secondly, it has necessitated increased financing and utilization of machines. So, a great advantage accrues to an organization with greater potential than that of the family-type farm, so characteristic especially of our East and Midwest.

Integration needs no definition, since we have heard and read about it until it is now becoming a bore. What it does mean, is that our farm units are becoming larger and getting under the control of fewer people. However, these people are tending to use more consultants or, if you wish, specialists which brings us to our third word, specialization.

Specialization in agriculture, means the production of one type of product, in contrast to the diversified programs of the past. Integration in the poultry industry was the precursor; today there are very few turkey, broiler or laying-hen raisers who operate their own projects without contracts or without some other type of association for the marketing, financing, feeding or raising of their birds. Through these associations a producer can have economic gains in excess of those which he can procure for himself; one might say that he has joined the team. At present, hog production is following closely the footsteps of the poultry operator. Beef and dairy cattle are also forging toward such integration. Here

in the West this tendency is probably more evident than in other areas of the United States. It is my opinion that this tendency eventually will spread completely through our country. Whether this trend is good or bad. is a debatable point, but I for one feel that it is a little frightening. However, this does not change the fact that whether we like it or not, the syndrome will occur. In the past the veterinarian assumed the role of the fireman. He has not done a great deal until the livestock owner was in trouble and called on him for assistance. By and large, he was not concerned with preventive medicine nearly so much as with technics for treating and salvaging sick or exposed animals. Also, the general practitioner like a crusader knight has attempted to become a fortress to himselfindependent, treating all types of farm animals and pets for all types of clients. Today, the veterinarian, like the knight of old, finds himself vulnerable to the team effort of organized, fast moving groups who put their faith in group, rather than individual ability.

Let us examine the corporations that are now about to replace or have replaced, to a great degree, Farmer Brown. These organizations frequently have top officers guiding them, who do not know animal husbandry, veterinary medicine, nutrition or other sciences concerned with the actual raising and care of livestock or poultry. Their watchword is efficiency and as far as they are concerned, efficiency is synonymous with economic survival. The first groups of this type of organization appeared in the poultry industry and we are all aware of the lack of ability or vision of the veterinarians to take their place in this industry. What are we going to do about it? There are probably thousands of different ideas, but here are a few of the most important ones, as far as I am concerned.

First, we are going to have to increase our technics and knowledge in treating a larger number of animals, easily and quickly. This means that we will have to put more emphasis on water-treatment, feed-treatment, air-treatment and rapid individual treatment.

Secondly, we will have to learn to work with accountants, nutritionists, geneticists, marketing specialists, processors and regulatory personnel.

Thirdly, we will have to learn more and more about our profession. I am sure that all of us spend a great deal of time keeping up with new materials in scientific journals and texts; and so you ask me now how are we going to devote even more time to this. My answer is: pick a specific field and learn a great deal about its marketing, its management, new machinery or equipment, as well

(Continued on page 36)

^{*}Presented at the Eaton Conference, April 1, 1960, San Francisco.



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Veterinary Economics

(Continued from page 34)

as the efficiency of new veterinary drugs and surgical technics involved. If you look over my last three statements, you will note that I have just repeated the three watchwords in agricultural trends: automation, integration, and specialization.

To take our rightful place in this new era there are many things which we can do both individually and collectively. Of course, we must do our job. Our basic education will be watched closely by our schools and examination boards. I believe that our schools should offer a curriculum not too rigid but one which will aid the students' ability in responding to economic changes quicker than in the past. We should pursue a campaign of self-education: this is extremely important today since we must keep our scientific information ahead of an extremely scientifically minded clientele. Short extension courses play an important role in this self-education picture. I believe that a closer liaison between the practitioner, the universities and the state and national associations would do much to attach more importance to these courses; at the same time, it would decrease the impression that courses such as these are offered because the practicing veterinarian is ignorant of his field.

In my opinion, scientific and professional know-how is not enough. We should attempt individually to "sell" veterinary medicine. The word "sell" may be odious to some of you, but I think we should stop being so thin-skinned and over-cautious, and take a good look at the whole agricultural picture, for it is agriculture we serve, and the best possible way we can serve it will be the most ethical, the most remunerative, and the most rewarding to us.

We should be ready to talk before groups and take part in local, state and national organizations. You may think that with the pressure of practice you are too busy for this. If we do not take time now, we may all find plenty of time on our hands later. By such participation, we not only will show our neighbors that we are capable of leadership but also, we will keep our fingers closer to the pulse of public thinking and action. Collectively, through our associations we should attempt to spread the word by publicizing the accomplishments of our profession. An educational campaign should also be instituted whereby the laity will be aware of our training and the possibility of our playing an important part in these new teams being organized every day all over the nation.

Lobbying seems to be a bad word today, but it is an effective way to maintain balance if the various organizations will use the right to lobby. Many times, I fear, we have not taken up the gauntlet and the balance rock has toppled over on us because our group effort has been either too little or too late.

When should we start this change? It is my belief that we have many advantages right now. Let me enumerate them:

- (1) The Food and Drug Administration with its "cancer scare" has shown the rank and file that many of our drugs are dangerous if not used correctly. Now is the time to prove that we are the ones to regulate the usage of these drugs.
- (2) With the advent of larger farming units and heavier production, animal contact and stress play now a role far greater than in the past. This poses new problems and the need for new answers which only the veterinarian is trained to supply.
- (3) Advances in scientific know-how have come so fast that the animal husbandry man cannot keep up with the latest developments for treating or controlling disease and parasites. Improved technology gives us more laboratory and diagnostic weapons which are beyond the scope of the layman. Finally, after diagnosis we now have more specific drugs with which to treat the animal, than we had in the years past.
- (4) As our agriculture production increases in size, it is also apparent that feed mills are becoming decentralized. This poses both a problem and a challenge. The producers will need advice and consultation from practicing veterinarians since they are far from their terminal mills. They are going to need specific feeds and treatment as well as continued advice which would not be practicable or possible to obtain at the farm. It is not expected that all feed manufacturers will rush in tomorrow morning to hire a "vet," but, I believe, if we do our job both as veterinarians and public relations men, this will be the path they will follow. Many of them are aware that the era of uncontrolled widespread usage of drugs is past. They are vulnerable when using medicines without adequate supervision and I believe that they are anxious to shift the responsibility.

No doubt, there are many obstacles between us and our goal line, which are not now apparent. Some of us may not "fare" well in this change. Others, I believe, will be greatly enhanced by it.

American College of Veterinary Toxicologists to Meet Aug. 14

The American College of Veterinary Toxicologists wishes to announce its third annual meeting which will be held in the Denver Hilton Hotel in Denver, Colorado, August 14th, the day preceding the 97th annual meeting of the AVMA.

The meeting is open to all veterinarians. For further information write to William F. Harris, Secretary, American College of Veterinary Toxicologists, 1102 East Main, Puyallup, Wash.



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News ... FROM OUR ADVERTISERS

As part of its expanding research program, the Norwich Pharmacal Company recently placed in operation a modern radioisotope laboratory designed to study the action of the nitrofurans.

The nitrofurans are a group of synthetic anti-microbial compounds, developed by Norwich and provided to the medical and veterinary professions by the company's **Eaton Laboratories Division**.

The new laboratory will use radioactive carbon 14-tagged nitrofuran molecules in its studies of mode of action and disposition of the compounds in laboratory animals.

The first ready-to-use parenteral form of a broad-spectrum antibotic specifically designed for veterinary practice has been introduced by Chas. Pfizer & Co., Inc.

Liquamycin Injectable is a clear sterile, stable solution containing 50 mg of oxytetracycline hydrochloride activity per cc. It is indicated in the prevention and treatment of many common infections caused by oxytretracycline-susceptible organisms in cattle, calves, sheep, lambs, swine and poultry.

The effectiveness of oxytetracycline has been proved by its successful use in millions of animals since the antibotic was discovered by Pfizer scientists in 1949, stated Hilmer L. Jones, D.V.M., veterinary medical director.

Wayne L. Davis has been appointed field sales manager of the Veterinary Department, Armour Pharmaceutical Company, Robert A. Hardt, president, announced.

A story about the organization of a new Explorer Scout group, which appeared in **Diamond Laboratories'** trade journal, Lab and Field, is now being distributed to some 5.300 Boy Scout executives throughout the United States.

The idea for such Scout groups to explore Veterinary Medicine was conceived after a survey was conducted in Michigan schools to determine the interests of teenagers. It was determined that a substantial number of boys in the age group between 14-18 were interested in Veterinary Medicine. The first such Explorer posts were organized in Chicago, but have since gained the interest of both Scouting and veterinary organizations in other cities.

Dr. S. R. Bozeman, Pitman-Moore Company vice-president and director of the firm's biological laboratories, has been named to the board of directors of Allied Laboratories (Canada) Ltd.

In Memoriam

DR. C. N. BRAMER

Dr. Clarence N. ("Cy") Bramer, passed away April 3. Services were held from the Los Altos chapel of Spangler Mortuary on Wednesday, April 6. Interment was in Alta Mesa Memorial Park. Dr. Bramer was a long-time member of the AVMA, CVMA and the AAHA. He was born in New York in 1901 and at the time of his death he operated the Alta View Animal Hospital in Los Altos. He is survived by a wife and daughter.

DR. CHAUNCEY B. MILLER

Dr. Chauney B. Miller passed away in San Francisco April 23. He was a member of the AVMA, CVMA, the Pacific Rod and Gun Club and the National Skeet Shooting Organization. Dr. Miller is survived by his wife, Nina, and a son, Major J. P. Miller, U.S.A.F. He was a native of Iowa.

DR. WILLIAM A. DRUMMOND

Dr. William A. Drummond of Hawthorne passed away April 14 as the result of an automobile accident. A graduate of Michigan State University, 1942, he is survived by his wife, Barbara, and three children. Dr. Drummond was a member of the AVMA, CVMA and Southern California VMA.

Dr. Bozeman's election was announced by J. L. McKee, president of Allied Laboratories, Inc., parent firm of both Pitman-Moore Company and Allied Laboratories (Canada) Ltd.

* * *

Fulvicin, the new antifungal antibotic, is now available under veterinary labeling, it was announced by the Veterinary Division of Schering Corporation. The new drug, known generically as griseofulvin, is the first effective fungistatic agent for oral administration to small animals with ringworm infections.

Available through graduate veterinarians only, Fulvicin is marketed in bottles of 100 and 500 tablets, and in strengths of 100, 250, and 500 milligrams.

Fulvicin was first marketed by Schering Corporation for human use in July, 1959.

For comprehensive topical therapy of cats and dogs, effective in a wide range of dermatologic and non-dermatologic disorders, E. R. Squibb & Sons introduces Panolog Ointment (veterinary). The new product is Squibb Triamcinolone Acetonide, Thiostrepton, Neomycin and Nystatin in Plastibase.

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Keraspray provides 4 potent antibacterials, plus a local anesthetic. This broad antibacterial activity makes it especially useful as a topical dressing following closure of surgical incisions, dehorning and castration.

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ONE PUFF IS USUALLY ENOUGH



Veterinary Division BRISTOL, TENNESSEE



LOCAL ASSOCIATION NEWS

Bay Counties VMA

On April 1 the BCVMA sponsored the Eaton Conference at the Fairmont Hotel, San Francisco. (See elsewhere in this issue for story.) At the May 10 meeting, held at the Fior d'Italia Restaurant, Dr. Seymour Roberts, program chairman, presented "Clinical Management of Eye Diseases in the Dog," with color slides.

Southern California VMA

On May 18, Dr. Cecil H. Coggins, Assistant Chief, Medical and Health Division, California Disaster Office, was guest speaker at the quarterly meeting of the SCVMA, in the Mayfair Hotel, Los Angeles. He spoke on the role of the veterinarian in Civil Defense. Dr. Coggins retired from the U. S. Navy in 1959 with the rank of Rear Admiral.

Alameda-Contra Costa VMA

At the April 27 meeting held in the Sea Wolf Restaurant, Oakland, Dr. William Greer from Asiatic Imports spoke on problems associated with the exotic pets. Most of the discussion concerned diseases of monkeys.

Dr. Bruce Ott, member of the experimental surgery team at the San Francisco Presidio, spoke at the May 25 meeting. His subject: heart lung machine.

OUT-OF-STATE NEWS

The annual meeting of the Arizona Veterinary Medical Association will be held November 13, 14 and 15, 1960, at the Safari Rotel, Scottsdale, Arizona. Local arrangements are under the direction of Dr. Elmer B. Powell, 1102 So. Scottsdale Rd., Scottsdale, Arizona. Phone WH 5-6479.

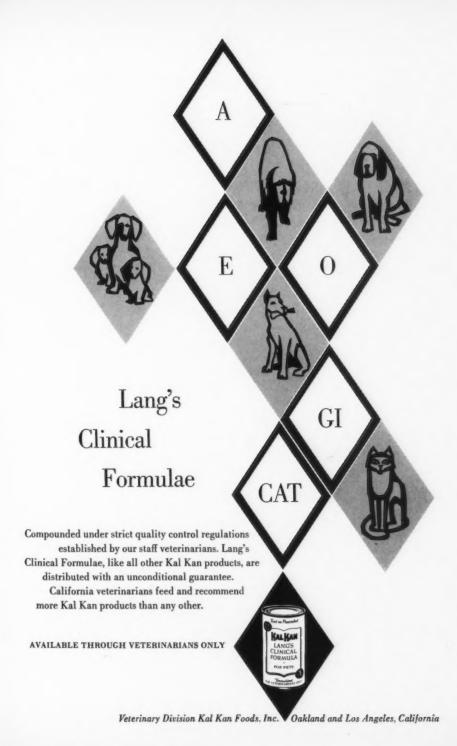


A June adventure—a thrilling ride to the top of Nob Hill, via a cable carl

Livestock Diseases Reported E. F. Chastain, D.V.M.

Tabulation of Diseases Reported to the State Bureau of Livestock Disease Control during the period January to April, inclusive, 1960.

		JanApril Incl., 1960		
		North	Central	South
tetinomyeosis				
inaplasmosis,	Cattle	9	2	3
	Sheep	1	1	
Anthrax.	Cattle	2	2	
	Sheep	1	1	1
Blackleg		1	1	1
Bluetongue			1	
Bovine Bacillary	Hemoglobinuria	1 1		1
Bovine Encephal	itis	1	1 1	
Coccidiosis,	Cattle	1	I	1
	Sheep	1	1	1
Contagious Eeth;	yma, Sheep	1 1	1	1
Cysticercus Bovi		3	7	97
Equine Encephal	omyelitis	1	2	1 1
Equine Infectiou		1	I	2
Equine Virus Ab	4	1	1	1
Erysipelas,	Sheep	1 1	1	1
	Swine	1	2	1
Foot Rot.	Cattle	Ī	I	1
	Sheep	1	1	1
Hydroplasis,	Lambs	1	1	1
Hog Cholera		1	1 1	1 2
Infectious Atrop	hic Rhinitis	1	Ī	1
Johnes Disease,	Cattle	1 4	1 3	i
	Sheep	1	1	Ī
Leptospirosis,	Cattle	19	33	1 3
en prompti dottoj	Horses	1 1	3	3
	Sheep	1	1	1
	Swine	3	1 9	1
Listeriosis,	Cattle	1	1	1
Didect totally	Sheep	1	1	1
Malignant Eden		1	T	1
Malignant Cata		1	2	1 1
Mucosal Diseas		1	1	1
Paratyphoid,	Cattle	1 5	12	1 6
r ataty priorus	Horses	1	1	1
	Sheep	3	1	1
	Swine	1 3	1	1 1
Psoroptic Scab,	Cattle	1	1	1
r soropue ocae,	Sheep	1	1	1
Rabies, Bovine	Careep	1	1	1 1
Rhinotracheitis		I	3	
Serapie		1	1	1
Scrapie Screwworm,	Cattle	1	1 1	1
Delea worm,	Horses	1	1	1
Sporadia Ravin	e Encephalomyelitis	1	1	1
-	lastro Enteritis, Swine	1	1	1
Tuberculosis,	Swine Swine	1	1	1
		1	1	1
Vesicular Exan	Landa Control	1	1	-
Virus Diarrhea		1 1	7	1
Vibrio fetus,	Cattle	1	1 1	-
	Sheep	-	1	1



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* * *
Profex 25 M.A. Model with fluoroscope; operates on 110 current. \$800. Write Box A-99,
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* * *

Picker Meteor, Style F-9, 15 m.a. fluoroscope vertical or horizontal. Can be set for film. Excellent condition. M. L. Spivek, M.D., 436 No. Roxbury Dr., Beverly Hills, Calif. CR 4-6025.

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Modern Small Animal Hospital, fully equipped, 75 animal capacity, located in West Los Angeles, near UCLA, Bel-Air, Brentwood and Beverly Hills. Will consider employment, lease, partnership, percentage or what have you. Because of other business interests it becomes increasingly difficult to supervise this hospital. For further information please write me: Harold D. Snow, D.V.M., 2421 Wilshire Blvd., Santa Monica, Calif.

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Lot zoned for small animal hospital. Only lot zoned as such on S. F. Peninsula, 125 feet back, 41 feet width. Street on both sides. \$17,500. Write Box A-98, THE CALIFORNIA VETERINARIAN.

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Twenty years' administrative work in Naval Service (retired Chief Yeoman). Desires to utilize past experience in connection with working with animals—prefers dogs. Perhaps with veterinarian, handling clerical and business matters, as well as general kennel and other all around work as required. S. F. Bay area desired. Have no professional experience

with animals. Ledyard Smith, 12661 Groveview, Garden Grove, Calif. LEhigh 9-9350.

* * * Graduate Veterinarian Wanted

Excellent opportunity with Nevada Department of Agriculture for graduate veterinarian with minimum of two years' postgraduate experience in general laboratory diagnosis. Salary range \$7,068-\$8,556. Qualified applicant may start near top of salary range. Location Reno. Duties primarily laboratory diagnosis. Substantial future for man qualified to assume duties of supervisor of laboratories. Civil Service position. Division of Laboratories, P. O. Box 9175, University Station, Reno, Nevada.

Fifty Years Ago

Dr. Clyde B. Outhier, the veterinary surgeon, left this afternoon on a trip to King City.

-From the Salinas Californian, Feb. 9, 1910.

The above item prompted Dr. R. E. Duckworth of Berkeley to send the following nostalgic letter to your Editor:

"Purely as a matter of amused interest I am enclosing this clipping. Just think of the changes in practice and transportation which have taken place since that time. King City is 50 miles from Salinas. Yet in 1910 when a man climbed into his buggy and set off for far-away King City it was newsworthy and, no doubt, it was something for people to talk about.

"I wonder why Dr. Outhier made this newsworthy trip? My first guess would be that he was on his way to the old Peachtree Ranch of Miller and Lux, to cut some colts, spay some heifers or maybe to vaccinate some calves. I feel sure that while he was there he would have gotten in a shot or two at some quail, in season or no. Dr. Outhier was quite a "sport" in those days.

"Another thing, when Dr. Outhier set out in his buggy you may be sure that people looked. He drove a shiny, rubber-tired rig that really sparkled, and his horse was the envy of all. And when he donned his duster, his gauntlets and his Stetson, you may be sure that that big handsome man caused many a feminine heart to flutter and throat to gasp! Then, as now, Clyde Outhier was a man to be proud of.

"I suppose it must be assumed that he returned safely from his trip to King City!"

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MONTHLY SICKNESS

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Indemnity for Dismemberment and Loss of Sight by Accident

For Loss of Both Hands, or Both
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Vita Wafers not only taste good—they're formulated to prevent and treat vitamin deficiencies, aid growth of pups and kittens, help maintain vigor and speed convalescence after surgery or illness. Vita Wafers contain (in balanced proportions) vitamins, trace elements, and essential unsaturated fatty acids.

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Vitamin A	.000 USP units	
Viatmin D	200 USP units	
Vitamin E	2 International	units
Vitamin B1	1 mg.	
Vitamin B2	1 mg.	
Vitamin B6	100 mcg.	
Vitamin B12	0.2 mcg.	
Niacin	10 mg.	
Folic Acid	50 mcg.	
dl-Methionine	25 mg.	
Iron	1 mg.	
Cobalt	14 mcg.	
Copper	50 mcg.	
Iodine	52 mcg.	
Magnesium	100 mcg.	
Manganese	27 mcg.	
Potassium	16 mcg.	

Linolenic acids....... 50 mg. (in Dicalcium phosphate-Protein base) Supplied: Dispensing bottle of 30 wafers; cartons of 12-30





I HAD A BAD COUGH THIS WINTER!



"I was coughing badly this winter, but my folks knew what to do. They kept me warm and gave me a good tasting cough syrup."



Blitz Schmidt Kansas City, Missouri

This "real good tasting cough syrup" was Haver-Lockhart's new COUGH SYRUP with ANTIHISTAMINE. The Schmidts got it from their veterinarian. And the reason for it's being so good is that it contains one of the safest, most effective antihistamines, pyrilamine maleate -providing anti-allergenic and anti-secretory actions. Combined with this antihistamine are two other important ingredients: Glyceryl guaiacolate, a valuable anti-spasmodic and expectorant for controlling coughs, colds, asthma, laryngitis, and other conditions of the respiratory system-and ammonium chloride, long used as an effective expectorant. The flavored syrup base is highly palatable. Recommended dosage for dogs

Recommended dosage for dogs is 1 to 2 teaspoonfuls diluted in 3 to 4 parts of water every three to four hours. For horses; 1 fluid ounce undiluted, with a dose syringe. For sheep, swine, and young animals, fractional doses according to body weight. Cough Syrup with ANTIHISTA-MINE is packaged in pints and gallons. 12-1 pint bottles; \$1.61 each. 4-1 gallon bottles, \$11.27 each. Haver-Lockhart Laboratories, Kansas City, Missouri





New Pipcide Syrup

Mild anthelmintic for dogs and cats

Haver-Lockhart's new Pipcide Syrup is identical to the official British piperazine citrate syrup formulation for human consumption. Dosage has been adjusted for use in pets. Highly palatable Pipcide Syrup provides, in a single treatment a full therapeutic dose for

the destruction of all common varieties of round worm. No fasting is required prior to administration

For removal of ascarids, recommended dosage: 1 teaspoonful (approximately 4 cc) per 10. lb. body weight. Supplied in one pint bottles; \$2.50. 12-1 pint bottles \$2.30 each.



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Insecticide-repellent
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N!O! Keeps male dogs away from bitches even during peak of estrus. In scores of tests on show dogs, hunters, and household pets, N!O! has given indisputable evidence of effectiveness. N!O! is supplied in convenient aerosol cans. 12—5½ oz.; only \$1.24 each.



An insecticide-repellent spray for fleas, lice, and ticks on dogs and cats. Use it as a deodorant against dog odor. Para Bomb M is supplied in 6 oz. and 12 oz. aerosol cans. 12—6 oz., 78c each. 12—12 oz.; \$1.09 each.

Haver-Lockhart Laboratories

Kansas City 41, Missouri

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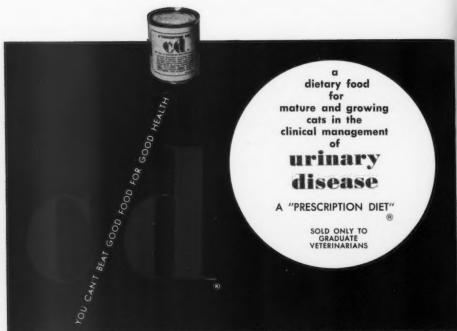




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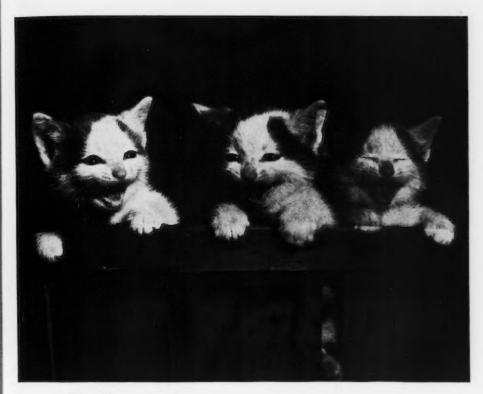
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